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Catalog 1990–91

BULLETIN OF
BRIDGEWATER COLLEGE

Bridgewater, Virginia 22812
703/828-2501

CATALOG ISSUE
ONE HUNDRED ELEVENTH SESSION,
1990-1991

Bridgewater College seeks to enroll qualified students regardless of sex, race, color, handicap, or national or ethnic origin; and further, it does not discriminate on the basis of sex, race, color, handicap, or national or ethnic origin in the administration of its educational policies, employment practices, admissions policies, scholarship and loan programs, and athletic and other college administered programs and activities.

Bridgewater College welcomes visitors to its campus and inquiries about its educational program. Athletic, cultural, and social events are open to the public. Visitors should make appointments in advance with persons they wish to see and for guided tours of the campus if such tours are desired. For directions to Bridgewater, see page 134.

The mailing address is Bridgewater College, Bridgewater, Virginia 22812, and the telephone number is 703/828-2501. Letters to the College should be addressed, according to the nature of the inquiry, as follows:

1. *President*—bequests, development program, foundations, and general matters pertaining to the College
2. *Provost*—personnel matters for academic, student development, and secretarial staff; general matters pertaining to academic affairs and student development
3. *Dean for Academic Affairs*—academic requirements, evaluation of credits, curricula, courses of study, and handicaps
4. *Business Manager*—expenses, plans for payment of tuition, accident insurance, permits to keep automobiles, and other business matters
5. *Dean for Admissions*—admission procedures, catalogs, viewbooks, and other information for prospective students
6. *Director of Financial Aids*—scholarships and financial aids
7. *Registrar*—student records and transcripts
8. *Director of Summer School*—all matters pertaining to the summer session
9. *Dean for Student Development*—general student affairs, handicaps, guidance and counseling services, housing
10. *College Chaplain*—student religious life and activities
11. *Director of Campus Activities*—general activities program and scheduling of banquets and meetings
12. *Director of Career Planning and Placement*—credentials to support applications for employment
13. *Director of Development*—development program, foundations
14. *Assistant Director of Development for Annual Giving and Alumni Relations*—annual giving, alumni activities
15. *Associate Director of Development for Planned Giving*—bequests
16. *Director of Church Relations*—church-college relations
17. *Director of Public Information*—news, publications

BRIDGEWATER COLLEGE CATALOG

VOLUME XVIII

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The Bridgewater College Catalog is a multi-purpose bulletin. Because it serves as an official record of the College, it describes the courses of study, explains the rules and regulations, states the cost of attendance, contains registers of the administration and faculty, and suggests the spirit that pervades the campus. The catalog, therefore, serves as a reference to faculty and students and also as an introduction to prospective students and their families and friends. The Table of Contents gives the major divisions of the catalog; the Index at the back of the book helps locate specific information of interest.



To The Prospective Bridgewater Student:

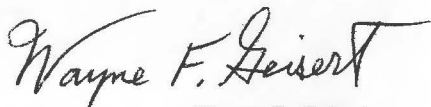
Soon you will need to make one of the most important decisions to be made early in life—you must decide which college you want to attend.

Right now, you are entering one of the most important stages of your life. You have a deep sensitivity to what is going on about you. Your concern—for your own life, for others, for the world—runs extremely deep. The people you meet, the things you learn, the things you do—all have incredible influences on your later life.

Bridgewater College, as a small, coeducational, liberal arts college, offers you the kind of education which contributes to the development of the whole person. It has a strong faculty, an excellent array of courses, and a good physical plant. It has a tradition of sound scholarship and a Christian concern for all who study and work within its walls.

In reading this catalog, do not try to understand what Bridgewater is, but try to understand what it is in relation to what you want. Is the academic program the program that will stimulate and develop your intellect? Are the co-curricular activities those that will build your character and feed your inner needs? Are the religious emphases such that you will feel free to enter into dialogue about your deepest spiritual struggles? Are you looking for a college where there is warmth and friendliness as well as intellectual stimulation?

The experience you are about to begin is not *an* experience. It is *your* experience. We hope that you will consider making Bridgewater College *your* college.

A handwritten signature in dark ink, reading "Wayne F. Geisert". The signature is fluid and cursive, with the first name "Wayne" being more prominent and the last name "Geisert" following in a similar style.

Wayne F. Geisert
President



Purpose

Bridgewater College strives to be an academic community with a distinctively Christian atmosphere and with a wholesome balance of learning, service, and leisure. The College endeavors to be a community in which each person is treated with respect, there is mutual concern and support, and each person can develop a sense of responsibility to others—both near and far. Bridgewater promotes breadth of intellectual experience as well as proficiency in specific subject fields. Broadly speaking, its primary academic objective is a comprehensive appreciation of the social sciences, the humanities, and the natural sciences.

Bridgewater endeavors to give its graduates a sound foundation as they choose and prepare for their careers. It is interested in their occupational competence and success and intends that they become both humane and effective professionals and practitioners. Bridgewater concentrates on developing the total person, serving the student planning to go directly from undergraduate studies into a career, as well as the one planning to pursue graduate or professional education. The Bridgewater graduate should be able to participate in life with resilience of mind and good judgment, with imagination in dealing with unexpected emergencies, with a sharpened ability to reason and communicate, and with disciplined taste and enjoyment. This concentration on the total person and general education differentiates the liberal arts college from technical and professional schools.

Developing the total person is taken seriously at Bridgewater. On the premise that a recognition of one's capabilities is the beginning of wisdom, Bridgewater offers a liberal education designed to help the student gain as complete a self-understanding as knowledge makes possible. As a college of liberal learning, it devotes itself to helping students find out how they think, what they feel, why they act, and who they are. Life at Bridgewater College can become a journey of exploration and discovery to the student who is committed unreservedly to the process of a liberal education.

In an age of rapid social and scientific change, it is more important than ever that a Christian liberal arts college invite its students to develop an appreciation of the complex bonds which relate persons to each other and to God. The student may discover his or her orientation for life in the library, the classroom, the laboratory, the rehearsal hall, the residence hall, or on the playing field. Believing that religion can be the integrating force in the lives of men and women, Bridgewater emphasizes the freedom and obligation of each individual to develop a personal faith and to find a meaningful place in the world.

Educational Objectives

To live up to its educational commitment as a liberal arts college, Bridgewater provides resources and encouragement for the student:

- to acquire the ability to speak and write the English language with clarity and effectiveness;

- to understand how people, events, and ideas of the past have shaped the world in which we live;
- to develop an understanding of the diverse cultures that comprise the global community;
- to understand the natural world and the method and philosophy of science;
- to appreciate art, music, and literature with sensitivity and critical judgment;
- to understand the economic, political, and social structures of our society;
- to develop competence in critical and creative thinking which will facilitate exploration of new areas of knowledge;
- to seek knowledge in depth in a particular field;
- to focus on a career choice which integrates interests, abilities, values, and commitments; and
- to strive for physical well-being, emotional maturity, and ethical and spiritual awareness.

Summary

The education offered at Bridgewater is broad, deep, and liberating. It can emancipate one from narrow provincialism and from the distortion of subjective bias; it can free individual creativity and promote the art of the examined life; it can develop the realization that the gift of life demands service to humanity. It helps to conserve basic values while recognizing the need for change. It leads one, while acknowledging that truth is not fully known, to submit to the best and fullest truth that can be known.



Bridgewater was established in 1880 as Spring Creek Normal and Collegiate Institute by Daniel Christian Flory, an alumnus of the University of Virginia and a young progressive leader in the Church of the Brethren which was organized in Schwarzenau, Germany, in 1708 by Alexander Mack. Nine years later the school was named Bridgewater College and chartered by the Commonwealth of Virginia to grant undergraduate degrees. Bridgewater conferred its first bachelor of arts degree on June 1, 1891, thereby becoming the first of the colleges having historic associations with the Church of the Brethren to grant degrees.

The founding fathers wisely conceived of and organized Bridgewater as a residential college because they realized that students learn from one another as well as from the faculty. They felt that the conversation of all the students would be a series of lectures to each. They knew that students from widely different places, holding varied views and opinions, would have much to generalize, to adjust, to eliminate, and many inter-relationships to be refined in living together over a period of four years. They surmised the successive student bodies would develop a self-perpetuating tradition which would be educational in itself.

Two major influences, the University of Virginia and the Church of the Brethren, have shaped Bridgewater as an educational institution and created its personality. Its historic association with the Church of the Brethren, its modified Georgian architecture, its Honor Code, and its seal on which is inscribed truth, beauty, goodness, and harmony bear testimony to the strength of these two shaping influences.

Besides Daniel Christian Flory, its first two presidents, three of its four academic deans, and many of its strong teachers were educated at Virginia, Thomas Jefferson's university. Two of these men, John S. Flory, Sr., the second president of Bridgewater and one of its most influential teachers, and John W. Wayland, one of its distinguished teachers who is noted as the historian of the Shenandoah Valley, became charter members of the Raven Society, an honor society, organized there in 1904. While students at Virginia, all these men imbibed Jefferson's ideals of freedom of thought and expression, of rugged individualism, and of quality education and carried them to and established them at Bridgewater. Succeeding generations of faculty members and students have jealously guarded these ideals.

The Church of the Brethren, a pietistic and pacifistic Christian body with which Bridgewater has been associated since its founding, had as a part of its teachings a recognition of the supreme right of every person—regardless of race, sex, class, or clan—to the full development of his powers. As a result, Bridgewater became the first co-educational liberal arts college in Virginia and one of the few accredited colleges of its type in the South which was not greatly disturbed by the Supreme Court's desegregation decision of 1954. Bridgewater's heritage and institutional idealism has determined that its educational program should emphasize ethical and spiritual values. This emphasis on values can be discerned in the course offerings in religion, in the convocation programs, in an inclination to think well of people, in the stress placed on inner-directed character, and in a strong social consciousness.

Daleville College at Daleville, Virginia, was consolidated with Bridgewater in 1923. Blue Ridge College at New Windsor, Maryland, was affiliated with Bridgewater in 1930. In 1944 the Blue Ridge College plant was sold to the Church of the Brethren Service Committee. After all legal debts of Blue Ridge had been liquidated, its remaining assets of \$44,861 were transferred to Bridgewater as a scholarship fund for qualified Brethren youth from Maryland. The consolidation of Daleville with Bridgewater in 1923 and the sale of Blue Ridge with the transfer of its assets to Bridgewater in 1944 transformed Bridgewater from a small local college into a regional institution of higher learning with a territory extending from the northern boundary of Maryland to the southern tip of Florida and from the Atlantic Ocean to the Mississippi River. This enlargement of Bridgewater's territory and constituency was achieved through the educational statesmanship of Paul H. Bowman, who was then president.

To further stimulate scholarship and to enrich the cultural life of the student body, Bridgewater became a participant in a cooperative program of undergraduate study abroad in 1962. The undergraduate study abroad program makes it possible for a select group of students to spend their junior years at Philipps-Universitat, Marburg/Lahn, Germany; at the Institut d'Etudes Francaises Modernes of the University of Strasbourg, France; at the University of Barcelona, Barcelona, Spain; at St. Mary's-St. Paul's and Gloucestershire Colleges in Cheltenham, England; or at the Dalian Foreign Languages Institute, Dalian, People's Republic of China.

Bridgewater has a student body of approximately 850 men and women from 20 states and several foreign countries who represent many races and creeds. (Bridgewater College is authorized under Federal Law to enroll non-immigrant alien students.) The College offers the Bachelor of Arts Degree in 28 major fields and the Bachelor of Science Degree in 18 major fields. Electing to keep its enrollment small, Bridgewater maintains a faculty-student ratio of 1:15, thus insuring that the College knows its students one by one. Bridgewater also offers the Bachelor of General Studies Degree, an individually prescribed degree program for mature adults.

Bridgewater insists that its teachers be not only proficient and inspiring disseminators of knowledge, but that they also be creators of it. Faculty members do research, read papers before learned societies, and publish books and articles. This emphasis on the search for knowledge has encouraged student-faculty research and has developed a challenging honors program.

These generalizations are supported by academic facts. Each year a significant number of the graduating class enter graduate and professional schools. Publications issued by The National Academy of Sciences (*A Century of Doctorates*, 1978) and The National Center for Educational Statistics (*Education Directory, Colleges and Universities 1977-78*) revealed that in terms of the number of graduates who later earned Doctor of Philosophy or equivalent degrees, Bridgewater ranked at the 75th percentile among the 1,956 four-year colleges and universities in the country for the period between 1920 and 1974. Since this percentile ranking was on the basis of numbers without regard to size of institution, it is obvious that in proportion to its size Bridgewater ranks very high among undergraduate institutions. The Bridgewater characteristic of being an outstanding undergraduate source of persons who later earn advanced degrees is not a new one but rather a long-standing one. For example, according to a study reported in the *Journal of Southern Research*, January-February issue, 1954, Bridgewater College ranked fifth among Southern colleges and universities on the basis of the number of their graduates who later earned advanced degrees in the sciences. According to a 1984 study of the period 1920-1980, approximately 1 in every 26 Bridgewater graduates went on to earn the doctoral degree. Thus, Bridgewater ranks competitively among the nation's top colleges and universities in terms of the percentage of its graduates who eventually earn the doctorate.



Over the years, Bridgewater graduates have received fellowships and assistantships for graduate and professional study from outstanding universities of the country. Bridgewater scholars have received Fulbright, Woodrow Wilson, National Science Foundation, Root Tilden, and Rockefeller Theological Fellowships.

Bridgewater is ever conscious of the fact that it was founded as a normal and collegiate institute and then developed into a college of arts and sciences. Each year about 15 per cent of its graduates prepare to enter the teaching profession. Bridgewater ranks near the top among the independent colleges in Virginia in the number of teachers it trains. Its contribution to higher education has been greater than that to elementary and secondary education. Bridgewater alumni are on the staffs of colleges and universities throughout the land. For example, the head of the Pathology Department at The Johns Hopkins School of Medicine, the head of the Physical Education Department at Georgia Institute of Technology, a distinguished Professor of Biology at the University of Illinois, the Director of Dramatic Productions at the University of Atlanta, and the former Dean of the Law School at the University of Missouri, are all Bridgewater alumni.

Acceptance by its peers in the field of education is the desire of every school. Bridgewater was accredited in 1925 by the Commission on Colleges of The Southern Association of Colleges and Schools as a Level II, General post-secondary institution, and has been a member in good standing ever since. It is also accredited by the State Board of Education of Virginia and offers a State-Approved Program of teacher education. Bridgewater is a member of the American Council on Education, the Association of Virginia Colleges, the Council of Independent Colleges, and the National Association of Independent Colleges and Universities.

Bridgewater College graduates have become leaders in many areas of our society. Their education at Bridgewater has encouraged them to use imagination and intuitive insights, gifts that lend themselves to leadership roles. The faculty recognizes that leadership involves more than technical skills and techniques; leadership also demands spiritual discipline as well as a liberal education and a caring attitude to relate meaningfully to other people.

Bridgewater has had an honorable history, spanning more than a century. It has been true to the Jeffersonian and Brethren ideals of the founders by encouraging freedom of thought, by pioneering in co-education and integration, by growing and developing to meet the changing needs of the passing years, by insisting on high scholastic standards, and by educating good and useful citizens.



Bridgewater College is located in the Shenandoah Valley, a scenic and historic region in Virginia. The Allegheny Mountains to the west and the Blue Ridge chain to the east are both visible from the campus. Old Stone and Mossy Creek Presbyterian Churches; the Cross Keys and Piedmont Civil War battlefields; and Natural Chimneys, an interesting geological phenomenon, are just a few miles off the campus. Many houses in the town of Bridgewater are 135 years old or older.

Situated in a beautiful and historic setting, the Bridgewater campus is comprised of 165 acres. The educational activities are focused on the primary campus of 40 acres on which are located Bridgewater's complex of buildings of different periods and styles of architecture. The beauty and charm of the campus complement Bridgewater's friendly atmosphere.

The rooms in all the residence halls are provided with single beds, mattresses, dressers, tables, bookshelves, window shades, and electric bulbs. Students provide linens, bedding, pillows, curtains, table lamps, rugs, and other furnishings desirable to make the rooms more attractive and comfortable.

Blue Ridge Hall, a residence hall for 150 women and a director of residence, was erected in 1949. The name of the hall honors Blue Ridge College of New Windsor, Maryland, which was discontinued in 1944. This building was renovated and air-conditioned in 1988.

Daleville Hall, another residence hall for women, houses 105 students, together with a director of residence. It was built in 1962–63. The name of the hall honors Daleville College of Daleville, Virginia, a Church of the Brethren college, which was consolidated with Bridgewater in 1923.

Dillon Hall, erected in 1965–66, houses 168 women and a director of residence. The name of the hall honors J. B. Dillon who was a trustee of Bridgewater for 26 years; his brother, W. D. Dillon, a benefactor of the College; and their father, John Henry Dillon, who was a leader in the Church of the Brethren.

Heritage Hall, erected in 1963–64, accommodates 170 men and contains an apartment for the director of residence, reception rooms, and recreation rooms. The hall is named in honor of Allen B. Bicknell, Newton D. Cool, Frederick D. Dove, John S. Flory, Mattie V. Glick, J. Maurice Henry, Minor C. Miller, A. Ray Showalter, C. E. Shull, and Marshall R. Wolfe, who gave the best years of their life to the College.

Wakeman Hall, erected in 1980, accommodates 102 men and a resident director. The building is named for Benjamin O. and Crystal Driver Wakeman, longtime friends and supporters of the College. Designed for the utmost comfort and utility, Wakeman Hall replaced Wardo as a residence for men.

Wright Hall, erected in 1958–59, accommodates 164 men and contains apartments for two residence hall directors, reception rooms, and recreation rooms. The name of the hall honors the brothers Frank J. and Charles C. Wright. Dr. Frank J. Wright, a distinguished geologist, was the first academic dean appointed at Bridgewater. Dr. Charles C. Wright served the College thirty-nine years as professor of economics and one year as acting president. From 1924 through 1946, he was both professor of economics and academic dean. In 1924, his brother Frank became professor of geology at Dennison University.

Rebecca Hall, erected in 1928–29 as a women's residence and dining hall, and completely renovated in 1969, now houses offices and studios of the art department, other faculty offices, the home economics departments, and a lecture room-auditorium for 200 persons. The building is named in honor of Mrs. Rebecca Driver Cline, wife of Benjamin Cline of North River, whose contribution helped pay for its construction.

CAMPUS SETTING AND FACILITIES

Residence Halls

Educational and Recreational Facilities

**Educational
and
Recreational
Facilities
(Cont.)**

Yount Hall, constructed in 1905, was extensively remodeled in 1977 to provide offices for the Admissions staff, the Director of Financial Aids, the Coordinator of Career Planning and Placement, and for faculty offices and classrooms. Its name commemorates the valued services of Walter B. Yount, Bridgewater's first president, and also the services of his gifted mother, Mrs. Margaret C. Yount.

Cole Hall, was erected in the summer and fall of 1929 as the auditorium section of a future administration building. The auditorium seats about 650 people and is equipped with a modern stage, dressing rooms, a stage lighting system, motion picture and sound equipment, an artist grand piano, and a three-manual Moeller organ with 51 ranks of pipes which was installed in 1974. The name of the building perpetuates the memory of Dr. Charles Knox Cole. It is a gift of his daughter, Mrs. Virginia Garber Cole Strickler.

Alexander Mack Memorial Library, named for the founder of the Church of the Brethren, was built in 1962-63. It houses more than 140,000 books and periodical volumes and seats 285 readers. A government depository since 1902, the Library also houses over 15,000 government documents. Other special features include the Church of the Brethren Room, faculty studies, a listening room, a microforms room, a seminar room, a typing room, and a photocopying room. The new Special Collections Room houses genealogy and Virginia history collections, as well as other special collections.

Flory Hall, named in 1984, in honor of D. C. Flory, the College's founder, and John S. Flory, long-time President and Professor, is the complex made up of the former Founders Hall (erected in 1903), Wardo Hall (erected in 1910), and the new link connecting these two historic buildings. Wardo Hall served as a men's residence for most of its history. Founders Hall has housed principal administrative offices and classrooms. Flory Hall will continue to house principal administrative offices, classrooms, and faculty offices.

Bowman Hall, erected in 1953, houses the natural and social science divisions. The name Bowman Hall honors Samuel M. Bowman, Paul H. Bowman, and Warren D. Bowman. Samuel M. Bowman gave the College an estate to promote instruction in biology, agriculture, and home economics; Paul H. Bowman served the College as president for twenty-seven years; and Warren D. Bowman served as president for fifteen years.

Memorial Hall, formerly known as Stanley Hall, was built in 1890. In 1927 it was renovated and re-dedicated as Memorial Hall. The building was modernized in 1953 and 1971. The first floor was made into a band room, a listening room, music classrooms, and practice rooms containing pianos and an electronic piano laboratory; the second floor has been converted into studios, a music stock room, a lounge, and a recital hall which is equipped with pianos and a nine rank tracker Moeller organ.

Nininger Hall, formerly known as Alumni Gymnasium, was named for R. Douglas Nininger, long-time chairman of the Board of Trustees, his wife and other members of his family. The building was erected in 1957-58 and was extensively remodeled in 1979-80. In addition to the usual athletic facilities, the building contains three new classrooms and a swimming pool that boasts a movable floor to accommodate the handicapped.

Jopson Field, named in honor of Dr. H. G. M. Jopson, emeritus member of the faculty and coach of track and cross country teams, is a spacious and attractive field lying along the southern boundary of the campus and bordering North River for several hundred yards. The original field was purchased and developed with contributions from the Classes of 1923, 1924, 1925, and 1926 and many other alumni and friends. Extensive renovation of the field was completed in the summer of 1971 when drainage and irrigation systems were installed, an all-weather track was constructed, and the football field and baseball diamond were relocated. In 1986 extensive renovations, including a 2500-seat football

stadium, were completed. The entire facility also includes practice and playing fields for soccer, field hockey, lacrosse, and softball.

The College Street Church of the Brethren is located on the campus. The first structure on the present location was erected in 1914. A new sanctuary and additional facilities for Christian education were added in 1953. The old sanctuary was converted into a chapel and extensive remodeling was completed in 1965. The faculty, students, and guests are cordially welcome to study and to worship.

The Kline Campus Center, completed in the summer of 1969, is one of the finest student services centers of its kind. It is named in honor of the Wilmer Kline family who gave generously in support of the cost of the facility and Elder John Kline, Church of the Brethren martyr during the Civil War. The main floor has a cafeteria with a student dining capacity of 550 and enclosed side dining areas for small student groups. The room will accommodate 900 under banquet conditions. Also on this level are a reception desk for campus visitors, the main lounge, an art gallery, and the college president's dining room.

The lower level houses a large bookstore, snack shop, billiards room, campus post office, and faculty-alumni room. Lockers are provided for day students. Student government and publications offices are on the top floor. The center, completely air-conditioned, is connected to Cole Hall auditorium and to the lecture room-auditorium facilities of Rebecca Hall.

Moomaw Hall, serving the home economics department, was built and put into use in 1969, honoring Leland C. and Nina Kinzie Moomaw of Roanoke, Virginia, who gave generously toward the project. The women of the southeastern region of the Church of the Brethren have also contributed substantial funds toward the building, and several church district and local women's groups gave continuous support. An area of the facility honors Miss S. Ruth Howe, former chairman of the department.

The C. E. Shull Computing Center honors Dr. C. E. Shull, professor emeritus of mathematics and physics at Bridgewater. Bridgewater students for three generations admired, honored, and respected Professor Shull both as a teacher and as a person. He devoted more than forty years to teaching thousands of students and to administering the Mathematics and Physics Department. Professor Shull was granted the honorary degree of Doctor of Science in June 1961 by his alma mater.

The computing center is equipped with a PRIME 4150 computing system which was installed in 1988. The computer is a high-speed interactive system capable of simultaneously handling educational and administrative jobs. The computing system includes tape and disc information storage, two line printers, twelve cathode ray terminals and a serial printer dedicated to student use, six terminals for faculty use, and several terminals and printers in the administrative offices. A number of microcomputers are also in use on campus serving various departmental needs.

The Reuel B. Pritchett Museum was established by Elder Reuel B. Pritchett of White Pine, Tennessee, who gave his large collection old books, old Bibles, and articles of antiquity to the College in 1954. The collection consists of 175 rare books, including a copy of a Bible published in Venice in 1482, and seven Bibles printed in Philadelphia in the eighteenth century by Christopher Sauer. Over 10,000 other items are included in the collection. The collection is housed in Cole Hall. All items in it have been catalogued and are available for inspection and study.

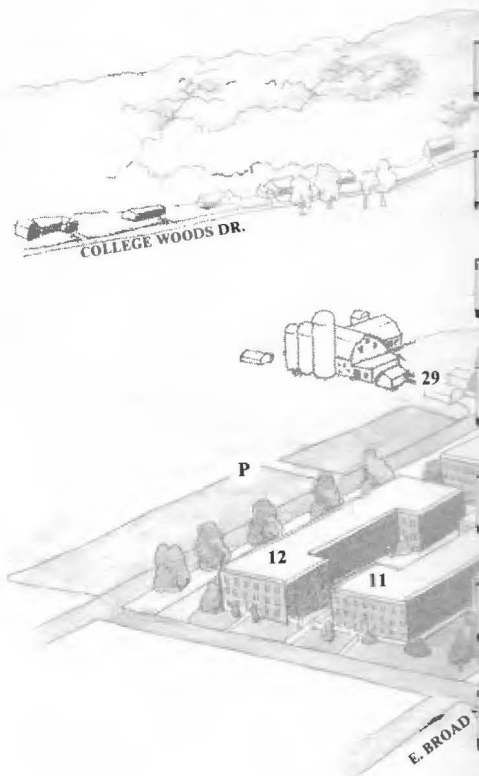
Among other physical facilities of the College are a number of faculty residences, several small apartment houses, the president's home, the central heating plant, the old gymnasium used for a maintenance and storage facility, and the College farm.

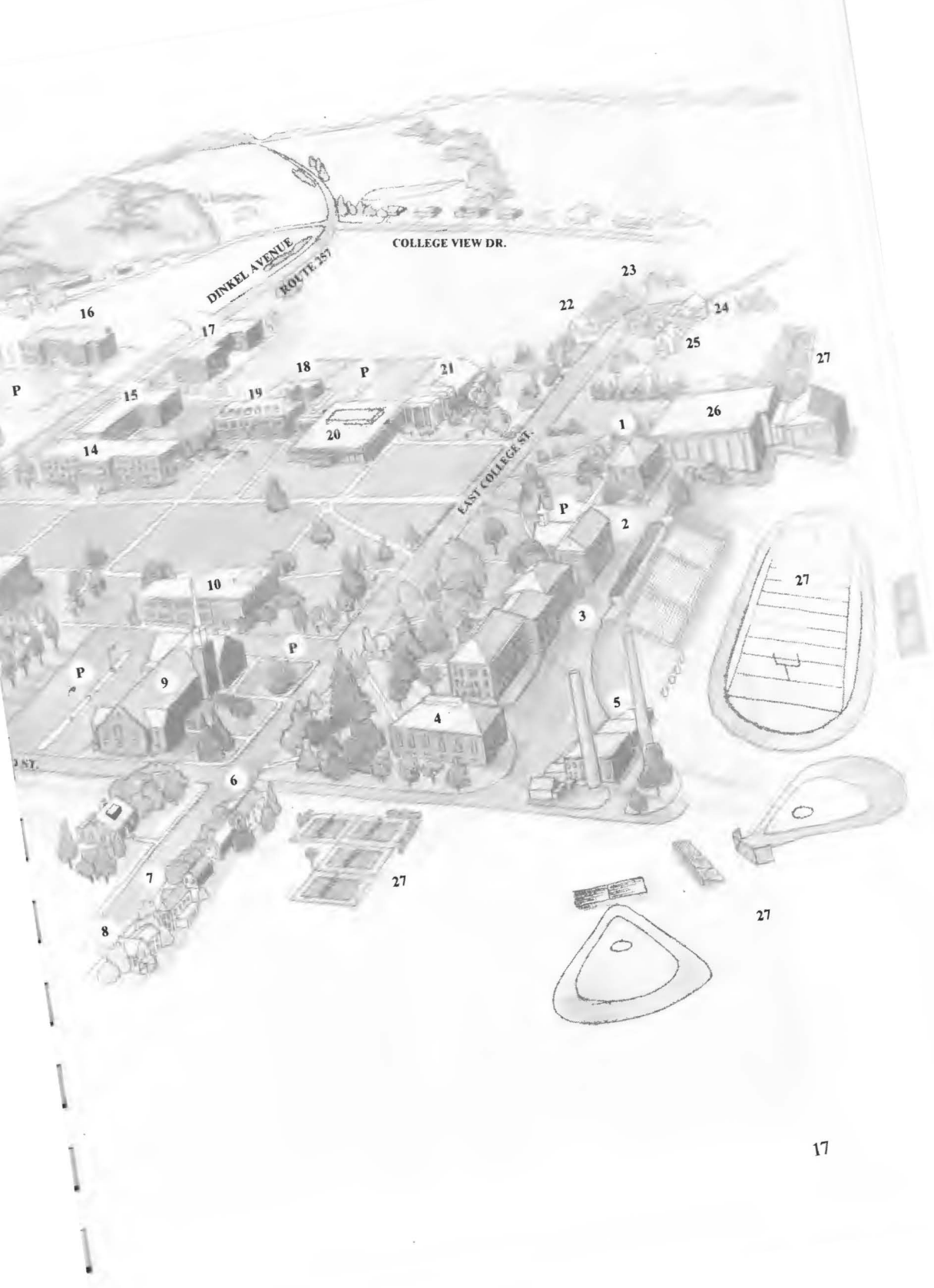
THE BRIDGEWATER CAMPUS

KEY TO BUILDINGS

(Date in parentheses indicates year of construction or acquisition)

1. Yount Hall (1905): Admissions Office, Financial Aids Office, Career Planning and Placement Office, Foreign Language Department.
2. Memorial Hall (1890): Music Department
3. Flory Hall (named 1984), comprised of the former Founders Hall (1903), Wardo Hall (1910), and the connecting link (1984): Office of the President, Office of the Provost, Office of the Dean for Academic Affairs, Registrar's Office, Business Office, Development Office, Departments of Education, English, History, Philosophy and Religion, and Sociology.
4. Old Gymnasium (1908): maintenance building
5. College Heating Plant (1921)
6. Manges House (1910): women's residence
7. Wright House (1900)
8. Missionary House (1900)
9. Bridgewater Church of the Brethren (1914)
10. Alexander Mack Memorial Library (1963)
11. Wright Hall (1959): men's residence
12. Heritage Hall (1964): men's residence
13. Bowman Hall (1953): Departments of Biology, Chemistry, Economics and Business, Mathematics and Computer Science, Physics, Psychology; C. E. Shull Computing Center
14. Blue Ridge Hall (1949): women's residence
15. Daleville Hall (1963): women's residence
16. Wakeman Hall (1980): men's residence
17. Dillon Hall (1966): women's residence
18. Moomaw Hall (1969): Home Economics Department
19. Rebecca Hall (1929): Art Department, Student Development Offices, Chaplain's Office, Counseling Office, campus radio station
20. Kline Campus Center (1969): visitor's reception, student services, dining hall, bookstore, post office, student senate and publications office
21. Cole Hall (1929): auditorium, Reuel B. Pritchett Museum, chapel
22. Boitnott House (1900)
23. Strickler Apartments (1955)
24. Bicknell House (1900): infirmary
25. President's Home (1949)
26. Nininger Hall (1980)
27. Jopson Field
28. College farm house (1900)
29. Greenhouse







A liberal arts college is ideally "a place where small groups of students live together in mutual good will, in friendly helpfulness, and in earnest study." In the words of Woodrow Wilson, "it is a mode of association . . . a free community of scholars and pupils." The words "free community" suggest common interests, living in the same place under the same laws, and participation in making and carrying out of the laws governing its members. Bridgewater has not realized completely this ideal of a college community, but it has achieved it in part.

The Student Government

Both the faculty and the student body participate in aspects of the operation of the College. The faculty is a central force in determining policy on academic matters and has significant influence on general college matters. The student body is organized into the administrative, legislative, and judicial branches. Through its president and appointed student members of faculty committees, students are involved in many aspects of the operation of the College. The Student Senate, an organization of students elected by the four classes, serves as the basic decision-making authority of the Student Body. The Senate must approve presidential appointments, may override presidential vetoes, may conduct impeachment proceedings against Student Government officials, sets guidelines for all activities of the Student Senate, the President's Cabinet, and the Honor Council, and allocates funds to various student groups. Through the Student Government an individual student has the opportunity to fulfill the role of a voting citizen in a community of 900 citizens, to help mold student opinion, to cooperate with the faculty in interpreting College traditions, to direct the Honor System, and to serve as a citizen in relation to a general governing body for many student co-curricular activities. The Constitution of the Student Government and the detailed regulations under which it operates are set forth in the *Eagle*, the handbook for students.

The Honor System

Personal honor, integrity, and faith in and respect for the word of another are the bases of the Bridgewater Honor System. The Code of Honor prohibits lying, cheating, and stealing. Violation of the Code by a student is a serious offense which can result in dismissal from Bridgewater. The Honor System is controlled and administered by the Honor Council, an important part of the Student Government.

Each Bridgewater student is encouraged to develop positive and wholesome patterns of study, work, worship, recreation, and the use of leisure time. It is anticipated that increasingly each should be able to manage his or her own discipline and that consideration of other persons' rights, regard for the common respectabilities and courtesies of adult behavior, and a desire to deepen and enrich one's own life will become central in his or her pattern of conduct.

Attendance at college is always a privilege, and not a right. Since students vary greatly in the levels of their maturity, it is desirable to indicate the expectations of the college relative to student citizenship.

Government

Campus Regulations

**Campus
Regulations
(Cont.)**



The College encourages its students to refrain from possessing or using alcoholic beverages. Students who feel that alcohol must be a part of their college lives should not attend Bridgewater. It is important that the student understand that possession or use of alcoholic beverages on campus, or returning to campus in an intoxicated condition, will subject the student to dismissal from college or other disciplinary action.

Possession or use of illegal drugs by Bridgewater College students is forbidden and will subject the student to dismissal or other disciplinary action. Furthermore, violators will not be protected from legal action.

The College prohibits *gambling, hazing* in any form, and the *possession or handling of firearms and fireworks* in the residence halls and on the campus. The use of profanity is discouraged, and smoking is limited to the out-of-doors, the residence halls, and the Snack Shop.

Permission to keep a vehicle at college must be obtained at the Business Office during the time of official registration in the fall. At all other times, permission may be obtained at the Office for Student Development. One must register a vehicle within twenty-four hours of bringing it to the College. Temporary permits are also available in the event that a student needs to substitute another vehicle for the one registered. Failure to cooperate with the above principles may subject the student to dismissal or other disciplinary action.

If, at any time, the conduct of any student becomes detrimental to the work of other students and to the best interest of the College, the administration reserves the right to request the student to withdraw from the college community. If and when a student is asked to withdraw, there is no refund of fees.

Students are held responsible for the proper care of their rooms and furniture. Room inspections are made occasionally, and damages are charged to the occupants of the room. Damage to other college property by students is likewise chargeable to them.

Bridgewater students take responsibility for their own laundry. Coin-operated washers and dryers are available in the residence halls, and local laundries and cleaners are located within walking distance of the campus. At the option of the student, linen service is also available on a rental basis through the Virginia Linen Service.

During the Thanksgiving, Christmas, and Spring recesses the dining room closes and students are required to vacate their rooms. The first meal to be served after each vacation is the evening meal prior to the day of registration or the resumption of classes.

The College rates are moderate and do not include guest privileges. The guests of students may be accommodated in College quarters for a limited time by special arrangement for a modest fee. The prevailing guest rates for meals will be charged at the dining room. All visitors at the College are expected to pay for meals taken in the dining room unless they are issued complimentary tickets by an official of the College.

Bridgewater College maintains separate residence halls for men and women, and each full-time student is required to live at the College or have permission from the Off-Campus Housing Committee to be a non-resident student. Letters of request for a non-resident status should be addressed to the committee c/o Dean for Student Development, prior to registration. Students who do not reside with parents or spouse are required to live at the College. Consideration for non-resident status is given to those who are age 24 before September of the academic year in question, or those who student teach during their final term at some distance from the campus. Requests to live off-campus during the Summer Term are also considered for those students who have employment in the area throughout the summer.

The conditions and provisions set forth in this catalog should not be considered as a contract between the College and the student. The College reserves the right to make

Campus Regulations (Cont.)

Resident Hall Regulations



**Resident
Hall
Regulations
(Cont.)**

changes in conditions and provisions when such changes seem necessary and wise. In practice such changes are rarely retroactive.

Automobile travel and athletic activities involve an element of hazard which students and parents should recognize. The College is always cooperative and helpful in cases of accidents and injuries but is not liable for any expenses resulting from them. Accident insurance is compulsory and is covered in the inclusive fee.

Bridgewater discourages frequent absences from its campus by students, whether for the purpose of going home or for visiting elsewhere, because absences break the continuity of academic work and harm the students' academic record. Parents are asked to cooperate fully in keeping at a minimum student absenteeism from the campus.

Sales representatives are not permitted to make solicitations in the dormitories except upon permission of the Administration. Students acting as sales representatives must secure a permit from the Business Office.

The College operates a snack shop on the campus to provide sandwiches and refreshments to students and faculty. No other group of students is permitted to sell refreshments on the campus without a permit from the Business Office of the College.

**Co-Curricular
Activities**

Bridgewater College promotes appreciation of the fine arts by bringing to the campus touring theatrical companies, stage personalities, professional musicians, and noted lecturers. The Committee on Cultural Activities plans the Lyceum Series of cultural programs and presents a series of artistic foreign and domestic films.

Four endowments support symposiums in which noted lecturers are invited to the campus. These lectureships are in honor of Harold H. Hersch, Anna B. Mow, W. Harold Row, and Glen Weimer. Such persons as Paul J. Warnke, Chief United States representative in the SALT II negotiations with the Soviet Union; Gene Sharp, Director of the Program on Nonviolent Sanctions at Harvard University; Judith Kipper, specialist on Middle East Affairs and Resident Fellow of the American Enterprise Institute; Marshall D. Shulman, Director of the Harriman Institute for Advanced Study of the Soviet Union and Professor of International Relations at Columbia University; and Robert S. McNamara, former U.S. Secretary of Defense and former President of the World Bank, are among the lecturers who have participated in the Endowed Lectureships Series.

The Campus Center Program Council plans and executes a recreational, social, and cultural program. It sponsors formal and informal dances, receptions, teas, informal parties, and special events. It also plans and executes the movie program on campus, Christmas week activities, the May Day pageant, and cooperates with the Director of Alumni Affairs in planning the Homecoming Day celebration.

Convocations

Convocations at Bridgewater College serve an integrative function in the general liberal arts educational program. This purpose reflects the desire of the College (a) to emphasize an interdisciplinary approach to issues in all academic fields, and (b) to explicate the interrelationship between culture and Christianity evident in Western civilization. Diverse media such as lectures, films, art, drama, and music are used to achieve those educational goals.

Two convocations are held each week during the ten-week terms. While specific attendance policies vary with the classification of the student, each student attends at least seven convocations per term. For a student who meets the convocation attendance



To the Campus come special guests such as the Honorable Andrew Young, Mayor of Atlanta and former United States Ambassador to the United Nations.

requirement, at the end of each term a grade of S is entered on the student's permanent record; for a student who does not, a grade of U is entered.

The Convocation Committee, established to implement the program, is composed of representatives from the three major liberal arts divisions: arts and humanities, social sciences, and the natural sciences. In addition, the Committee includes the Dean for Academic Affairs, the Dean for Student Development, and student members appointed by the Student Senate.

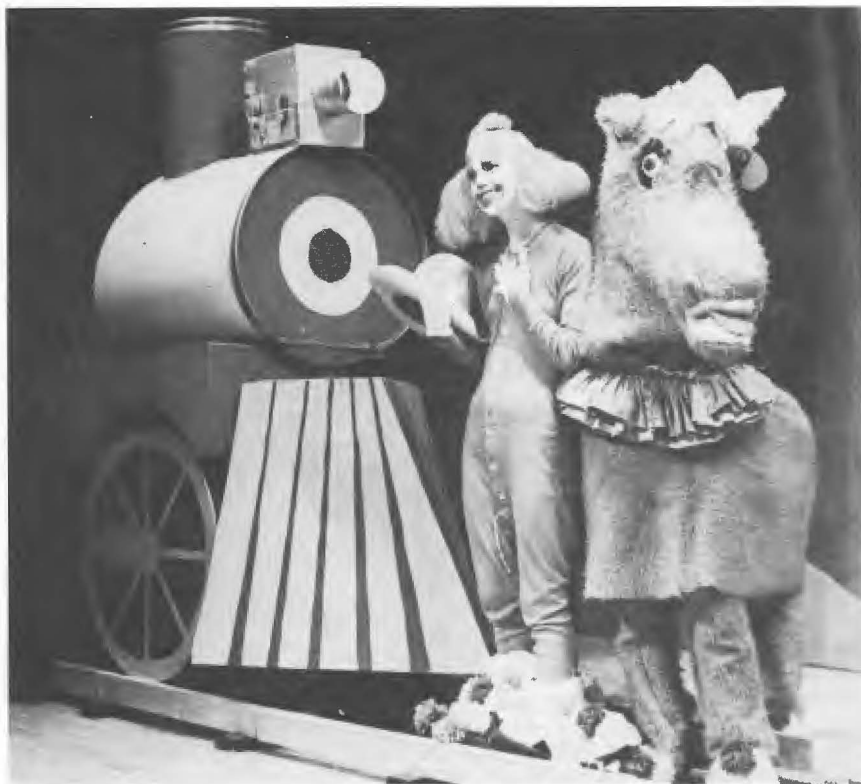
Athletics

A strong believer in the old Roman adage of a sound mind in a strong body, Bridgewater encourages both men and women students to participate in sports by fostering a challenging intramural program and also a varied intercollegiate one. The College believes that actually competing in sports is far more rewarding than being a spectator at sports events.

The intramural program includes badminton, basketball, flag football, racquetball, soccer, softball, tennis, track and field, and volleyball for both men and women. In intercollegiate sports, Bridgewater fields teams in baseball, basketball, football, golf, tennis, track, and cross country for men. The women participate in basketball, cross country, field hockey, tennis, lacrosse, softball, and volleyball.

Bridgewater College holds membership in the National Collegiate Athletic Association and abides by all regulations set forth by this body. Bridgewater is also a member of the Old Dominion Athletic Conference.

**Co-Curricular
Activities
(Cont.)**



Theatre Activities

The Pinion Players, assisted by other students on the campus interested in theatre, present two full-length plays and a theatre workshop each year in order to develop theatrical talent, to keep the College community acquainted with examples of contemporary and classical theatre, to suggest to students the vocational and avocational opportunities in the field of theatre, and to provide laboratory opportunities for students enrolled in acting and play production classes.

Debate

Bridgewater College offers its students an opportunity to participate in intercollegiate debate. Each year College teams participate in a number of invitational tournaments, and over the years Bridgewater debaters have won top honors. First year debaters may compete in the novice division while the varsity division is open to all experienced debaters. The Debate Club is the sponsoring organization.

Music

Bridgewater recognizes the importance of music, not only as a part of the curriculum of a liberal arts college, but also as a vital part of campus life. Students are encouraged to participate in the several musical organizations of the college.

From its founding, Bridgewater has been known as a "singing college." There are three choral groups. The Oratorio Choir is the large ensemble that rehearses during the Fall Term and performs a major work during the advent season. The Concert Choir, a group of 45-50 students, performs on campus and tours extensively in the Spring Term. The Chorale is a group of 16 singers that performs on campus and tours at various times during the year to schools and churches.

Instrumental ensembles at Bridgewater include the Concert Band, the Stage Band, the Pep Band, and small woodwind and brass ensembles. These bands and ensembles perform on campus both formal and informal concerts and tour at various times during the year.

Rich expressional activities, including frequent student recitals, parallel the courses in theory and applied music. Private instruction in piano, organ, voice, and instruments is available for students.



Publications

Students write, edit, and publish a newspaper. *The Talon*, which highlights campus news and affords students opportunities to air publicly differences of opinion on controversial issues, College policies, and student government action. Students also publish a yearbook, the *Ripples*, which is usually distributed in May of each year. Both the newspaper and the yearbook have won honors in state and national competition.

**Co-Curricular
Activities
(Cont.)**

The *Eagle*, a handbook for all students, contains the constitution and bylaws under which the Student Senate operates, a register of the faculty, a register of student leaders, the school calendar, a list of student organizations, the words of the College song, and a summary of Bridgewater ideals and traditions. The College publishes annually the Catalog, the President's Report, a Bridgewater Magazine, and three issues of the Bridgewater Newsletter for parents of students and friends of the College.

The *Philomathean* is a journal of student papers, essays, short stories, poems, and visual art published each year by Bridgewater College. Philomathean means love of, or devotion to, learning; the Philomathean reflects this ideal by recognizing and honoring student creativity and scholarship. A student may submit work produced for a course or on his or her own initiative, or faculty members may recommend a student's work, to a faculty editorial board which selects the contributions to be included in the Philomathean.

Other Organizations

The Young Democrat's Club, Young Republican's Club, French Club, Ski and Outing Club, Bridgewater College International Club, Circle "K," Women's Athletic Association, Fellowship of Christian Athletes, Mu Epsilon Mu, Omicron Delta Kappa, Photo Club, Physics Club, Pre-medical Society, Spanish Club, Student Chapter 168 of the Music Educators Conference, Guild Student Group of the American Guild of Organists, the Bridgewater College Chapter of the Student National Education Association, and the campus radio station WGMB are among other student organizations at Bridgewater.

**Student
Services**

Freshman Orientation

To help incoming freshmen adjust quickly and happily to college life, four days are devoted to their orientation at the beginning of the fall term. The Council on Student Affairs and the Deans for Student Development direct the program. Upperclassmen serve as student-to-student counselors for small groups of freshmen. Directed group discussions are held regarding study habits and note taking, Bridgewater ideals and traditions, the Honor System and how it functions, co-curricular participation, and social opportunities. Through planned social gatherings, freshmen are given chances to meet their classmates and to become acquainted with their instructors and faculty advisers.

Objective tests and examinations are given to freshmen during this orientation period to gather valuable data to be used later for placement, counseling, and guidance purposes.

Counseling and Guidance

The Counseling Program at Bridgewater College helps students to know themselves in their social milieu; to meet their personal, academic, and social problems intelligently; and to adjust themselves creatively to their fellows. In addition to the Dean for Academic Affairs, the Deans for Student Development, the Chaplain, the College Nurse, and the residence hall directors, the entire teaching staff at Bridgewater College is involved in guidance and counseling.

Students are assigned to faculty advisers in the department in which they intend to major. Because the primary responsibility of a faculty adviser is to advise concerning registration, course requirements, and academic regulations, personal counseling is usually referred to one of the appropriate staff members named above. In this connection, the Deans for Student Development have particular responsibility to help students understand themselves and to assist them in their adjustments to college life and work.

Career Planning and Placement

The Career Planning and Placement Office works in cooperation with the faculty and the Alumni Office for optimum help to students. It provides personal interviews, testing, small group sessions, and printed resources to assist the student in planning toward a satisfying and productive career. The student is guided in (1) understanding of self, especially those factors of interests, abilities, and personal qualities that contribute to wise career choices, (2) knowledge of various occupations and levels of work, (3) awareness of long-range career options, and (4) developing interview and resume skills.

The Director of Career Planning and Placement, faculty advisors, and the Dean for Academic Affairs assist academically able students in securing admission to graduate and professional schools and in securing graduate fellowships and assistantships.

For students seeking employment immediately following graduation, and for recent graduates, the College operates a placement service. This office lists job opportunities, arranges for on-campus interviews between seniors seeking positions and representatives of business, industry, and school systems, and supports student job applications with credentials.

Health Services

Every effort is made by the College staff to promote the health and physical welfare of students through proper sanitation and cleanliness, safeguarding food supplies, and teaching physical education. The Council on Student Affairs cooperates with the College Nurse and Physicians to provide the best conditions possible for the physical welfare of students. A physical examination is required of all new students prior to registration. Vaccinations and inoculations against contagious diseases are required.

The infirmary is under the general supervision of the College Nurse, whose services are available to all students. In case of common illnesses, boarding students receive the services of a college physician while he is on duty in the infirmary. Where treatments at other times or prescriptions are necessary, the student will be expected to pay the doctor or the druggist directly. Day students may receive treatment in the infirmary.

The College views religious activities as natural and essential parts of student life. Students are encouraged to deepen their understanding of the Christian faith while they are on campus and to give expression to their Christian beliefs through campus religious activities. Opportunities are provided to make Christian commitment more meaningful through group worship experiences and service projects.

The College Chaplain is involved with students in experimental ministries and worship, small group ministries and counseling, and the holding of special interest retreats. He is a member of the College's counseling staff and available to staff, faculty, and students for personal and religious counseling.

The Council on Religious Activities, composed of faculty and student membership and working with the Student Committee on Religious Activities, provides support for the many initiatives through which students and faculty grow religiously together. Thus, special interest religious groups are encouraged; regular chapel worship services and religious convocations are held; and retreats, discussion groups, religious emphasis lectures, movies on religious themes, service activities, Bible study and prayer groups, etc. are planned. There is an active organization, Students Interested in Relating to the Church, through which students may consider the various dimensions of full-time church vocations.

Student Services (Cont.)

Religious Life and Services

Study Abroad Program

The Bridgewater Church of the Brethren is located adjacent to the college campus and provides a church home for many students. Baptist, Methodist, and Presbyterian churches are located in the town of Bridgewater, and students take an active part in their programs. A Roman Catholic Mass is celebrated weekly in the campus chapel. Students also participate in the worship and work of the churches of Harrisonburg where Baptist, Brethren, Episcopal, Lutheran, Methodist, Presbyterian, Roman Catholic and other churches are to be found. A Jewish synagogue is also located there.

A number of special interest student groups are active including the Brethren Student Fellowship (on campus), the Baptist Student Union (center in Harrisonburg), the Wesley Fellowship, and the Lutheran Student Association as well as in conjunction with the Brethren, Methodist, Presbyterian and Baptist churches of Bridgewater. The Fellowship of Christian Athletes for both men and women and the Inter-Varsity Fellowship are active on campus. Students are encouraged to maintain their denominational affiliations as well as to participate in the ecumenical religious activities that give significance to the Christian faith.

The Study Abroad Program currently provides for a year of undergraduate study at the Philipps-Universität, Marburg/Lahn, West Germany; University of Strasbourg, Strasbourg, France; or the University of Barcelona, Barcelona, Spain; or one or two semesters of study at The College of St. Mary's and St. Paul's, Cheltenham, England, the Dalian Foreign Languages Institute, Dalian, People's Republic of China, and Hokusei Gakuen University, Sapporo, Japan. The program is conducted by Brethren Colleges Abroad, a cooperative program sponsored by Bridgewater College and five other colleges affiliated with the Church of the Brethren. A resident director is maintained at each location to coordinate the program with the host university officials and to assist students as need arises.

Students can receive a full year of college credit at one of the five universities, including round trip transportation, for approximately the same cost as a college year in the United States. Limited scholarship assistance is available to students participating in this program. The program provides an opportunity for a mastery of the German, the French, the Mandarin, or the Spanish language; a first-hand knowledge of a foreign culture; and an opportunity to become an active participant in the challenging task of creating a climate of mutual respect and understanding among the nations of the world.

Participants in Brethren Colleges Abroad programs in Europe fly from New York in late August. During September and October, the students attend special language training institutes where the emphasis is on conversational skills, vocabulary necessary for successful attendance at Strasbourg, Marburg, or Barcelona, and orientation to the culture and civilization of contemporary France, Germany, or Spain.

The winter semester at the European universities runs from approximately November 1 to March 1. During the winter semester, the students select their courses from a wide variety of offerings in modern languages, history, literature, economics, political science, religion, philosophy, and the natural sciences.

Marburg students are allowed almost six weeks for special and independent study or travel between the winter and summer semesters. The summer semester begins at Marburg about the middle of April and closes in mid-July. There is no such semester break at Barcelona or at Strasbourg; however, vacation periods are allowed at Christmas and Easter. The second semester at Strasbourg closes early in June; at Barcelona, about June 15. All participants in the European programs are expected to take the full academic year of work.



The academic year at the Dalian Institute of Foreign Languages begins in September and runs for ten months; the Spring Semester begins in February and runs for five months. BCA students study intensive Chinese language plus courses taught in English on China Today, Chinese Civilization, and American and British History and Literature, the latter taught with advanced Chinese students of English. Courses are also available in French, German, Spanish, Russian, and Japanese languages and area studies. Students have opportunities for travel between Fall and Spring Semesters.

Hokusei Gakuen University in Sapporo offers semester and full year options of intensive Japanese language study, courses in Japan Today, Japanese Culture, and Japanese Business with visitations and internship options, plus elective courses taken with advanced Japanese students of English. For the Fall Semester, students leave the United States the first of September and complete the semester either before or after Christmas depending upon course options. For the Spring Semester, students leave the United States during the first part of March and complete the semester at the end of June. Students who choose to spend the entire year in Japan have opportunities to travel or engage in six-week internships between semesters.

Candidates for the programs in continental Europe must have had at least two years or the equivalent of the German, the French, or the Spanish language at the college level. Candidates for the China or Japan programs need no previous training in Chinese or Japanese languages. Other qualifications include high general academic ability, emotional stability, intellectual initiative, the ability to participate constructively in the life of a small group, and the personal attributes which will permit one to serve as a responsible and scholarly representative of America abroad. Applications for admission to the program must be filed with the Dean for Academic Affairs before January 15 of the sophomore year.

Honors and Awards

The program at The College of St. Mary's and St. Paul's is designed primarily for students who plan to teach, and it is particularly appropriate for students of elementary education. While a student may participate in this program in either or both the fall or spring semesters, the fall semester is typically chosen by Bridgewater students.

Scholarship Honors

Bridgewater holds before its students the ideal of achieving to the limits of their powers, especially in the academic area. From time to time, appropriate recognition is given to students whose performance in the pursuit of knowledge and truth is outstanding.

Dean's List—At the end of each term, the Dean for Academic Affairs announces the Dean's List which consists of the names of all students who have a quality point average of 3.20 or above on the program of courses attempted. These students are also nominated by the Dean for Academic Affairs for recognition through the National Dean's List.

Graduation Honors—One may graduate from Bridgewater summa cum laude, magna cum laude, or cum laude. To graduate summa cum laude, a student must achieve a quality point average of 3.80, complete an honors project with a grade of B or better, and score in the upper quarter on the written and oral comprehensive examinations. To graduate magna cum laude, a student must achieve a quality point average of 3.50, complete an honors project with a grade of B or better, and score in the upper half on the written and oral comprehensive examinations. To graduate cum laude, a student must achieve a quality point average of 3.20 and perform satisfactorily on the written and oral comprehensive examinations. Honors oral examinations are administered prior to April 15 by the student's major professor with the assistance of two other faculty members appointed by the major professor and the Dean for Academic Affairs. Usually, one member of the orals committee is from outside the student's major department.

Transfer students may receive honors. To graduate with honor recognition, a transfer student must not only conform to the above standards but must also achieve an equivalent standard on his or her total academic record, including work taken prior to transfer.

The Lambda Society—The primary purpose of the Lambda Society is to encourage scholarly effort and achievement and to honor and reward students, faculty members, and alumni who have achieved unusual distinction in the pursuit of knowledge. Seniors are eligible to be elected to full membership when they have successfully passed the requirements for graduation with honors. Upperclass students who have achieved honor grades may be elected to Associate Membership.

Alpha Chi—The Virginia Gamma Chapter of Alpha Chi, a national collegiate honor society, is organized to promote truth and character, to stimulate and recognize scholarly effort, and to encourage critical and creative thinking which will enable one to explore new areas of knowledge. Junior and senior members of Lambda Society who have completed at least thirty units at Bridgewater, possess a cumulative quality point average of 3.20 or above, and rank in the top ten per cent of their class are eligible for election to membership in this society.

Other Honors

Bridgewater elects annually from fifteen to twenty seniors to membership in Who's Who Among Students in American Universities and Colleges on the basis of scholarship, leadership in co-curricular and academic activities, citizenship and service to the College, and promise of future usefulness to society.

Omicron Delta Kappa, a national honorary collegiate leadership fraternity, promotes leadership qualities and recognizes excellence in academics, campus life, citizenship, and fellowship.

There is a chapter of Delta Sigma Rho-Tau Kappa Alpha, a national honorary forensic society, on campus. Membership is restricted to students who have distinguished themselves in intercollegiate debate and have a high level of academic achievement.

Bridgewater has a chapter of Pi Delta Epsilon, a national honorary collegiate journalistic fraternity, on the campus. This organization seeks to develop student interest in journalism, to improve student publications, and to promote high ethical standards in collegiate journalism. Only students who have done outstanding work on *The Talon*, the student newspaper; on the *Ripples*, the student yearbook; or with WGMB, the campus radio station, are eligible for membership in Pi Delta Epsilon.

Alpha Psi Omega, a national honor society devoted to developing dramatic talent and the art of acting, to cultivating disciplined taste in drama, and to fostering the cultural values of dramatic art, has a chapter on the campus. Membership in this honor society is restricted to those who have distinguished themselves in acting, production, or directing.

In the spring of each year an honors convocation and an athletic awards banquet are held. The honors convocation recognizes excellent achievement in academic and co-curricular pursuits. At the sports banquet outstanding achievements in intercollegiate sports are recognized with appropriate awards.

Bridgewater operates a three-week summer session and a six-week summer session to enable students who wish to do so to complete their degree requirements in three years instead of four, to enable students who have fallen behind in their work to regularize their programs, and to enable teachers who need credits in academic and professional subjects for the renewal of their certificates to secure them.

An integral part of the total college program, the summer session offers standard courses, most of which are taught in the regular session; it is staffed by men and women chosen from the regular faculty. A student may enroll for a maximum of four credits in the three-week session and seven credits in the six week session. To enroll for more than the maximum, a student must apply for permission from the Dean for Academic Affairs.

The Alumni Association, organized prior to 1900, seeks to strengthen the bond of loyalty between the alumni and their alma mater, fosters an *esprit de corps* of good fellowship among alumni, organizes and maintains strong local chapters, and helps promote the growth and development of the College.

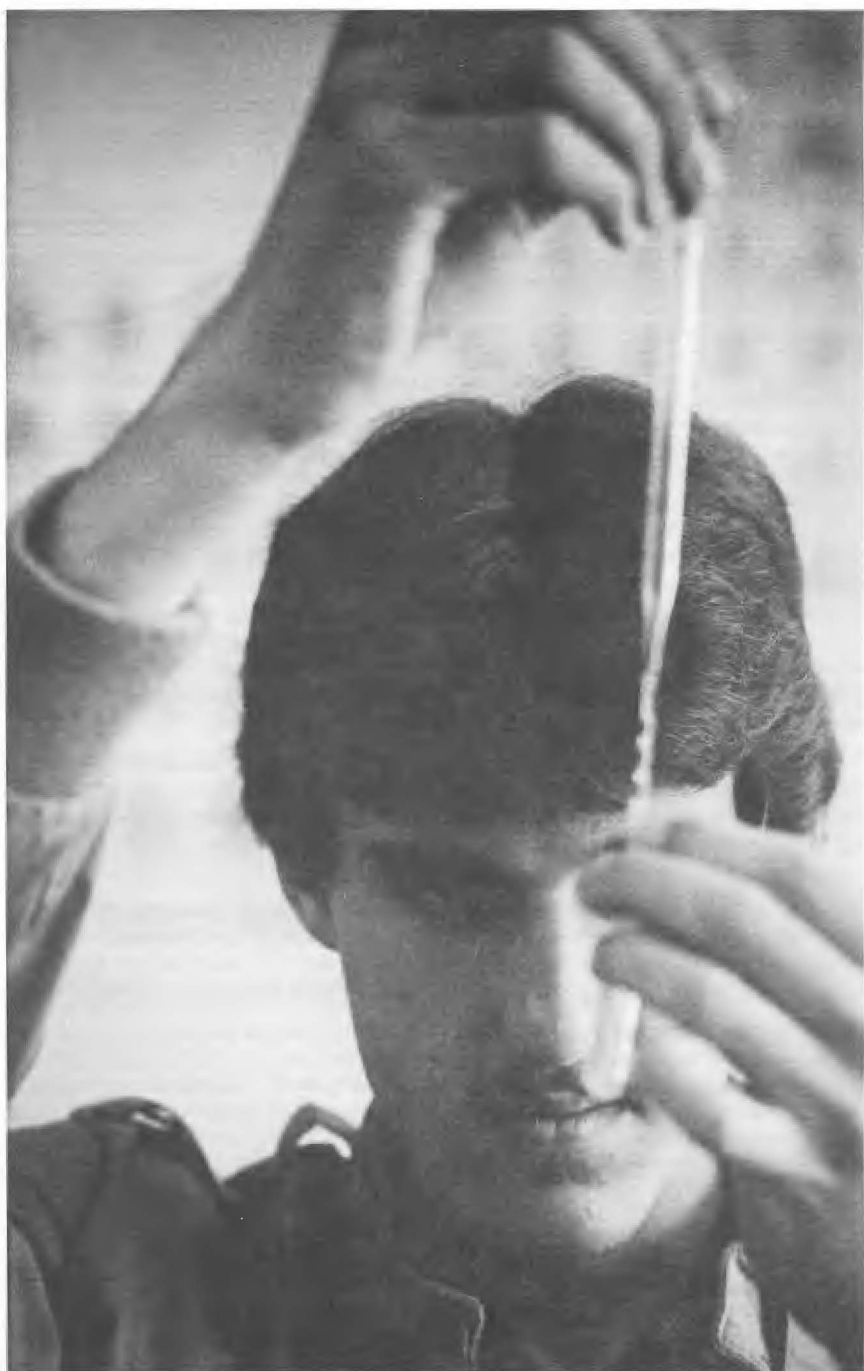
The Alumni Association is governed by its elected officers and a board of directors composed of 29 members. The Assistant Director of Development, as the chief executive of the association, directs all alumni relations and activities and helps organize and maintain chapters throughout the nation. At present there are 25 active alumni chapters and fellowship groups.

All graduates and students who have completed at least twelve semester hours of credit at Bridgewater College are eligible for membership in the Alumni Association. Those who have graduated or earned transferable credit at Bridgewater or from the former Blue Ridge or Daleville Colleges, prior to 1966, are members of the association. Faculty, staff, trustees, and those awarded honorary degrees are honorary members of the association. The association charges no dues but all members are urged to make annual contributions to the alumni fund. These yearly contributions keep the alumni in good standing and their memberships active.

Honors and Awards (Cont.)

Summer Session

Alumni Association



R*requirements.* Bridgewater College seeks to enroll qualified students regardless of sex, race, color, handicap, or national or ethnic origin; and further, it does not discriminate on the basis of sex, race, color, handicap, or national or ethnic origin in the administration of its educational policies, employment practices, admissions policies, scholarship and loan programs, and athletic and other college administered programs and activities. Admission is granted to those who present evidence of ability to succeed in the type of program provided. While success in a liberal arts college may depend upon several qualities, applicants for admission to Bridgewater are expected to show the following types of ability and achievement:

1. *Graduation from an accredited senior high school or secondary school.* The program of courses completed in the high school should include the following units of credit; four in English; two in one foreign language, preferably in French, German, or Spanish; two in college preparatory mathematics, preferably algebra; two in social studies and history; two in science; and four in suitable electives. While the electives may be in vocational or non-academic subjects, it is recommended that they be in academic subjects such as English, science, mathematics, and social studies. In case the applicant wishes to become an engineer or scientist, two of the four electives should be in mathematics. Applicants from Virginia high schools are encouraged to take a program leading to the Governor's Seal Diploma.
2. *Average or better than average scholarship on the secondary school program completed.* The grades or marks made on the high school or secondary school program and scores made on achievement tests covering the secondary school subjects should be high enough to give reasonable assurance of ability to do college work. Rank in the upper half of the graduating class is normally required. If an applicant ranks lower than the upper half, strong compensative qualities need to be shown in order to gain admission.
3. *A satisfactory score on the Scholastic Aptitude Test (SAT) of the College Entrance Examination Board or the American College Test (ACT) of the American College Testing Program.* While applicants are not required to take the Achievement Test (ACH), they are urged to do so. The Achievement Tests in English Composition and in Intermediate or Advanced Mathematics are recommended especially. A bulletin of information concerning these tests may be obtained from high school officials or by writing directly to the College Entrance Examination Board, Box 592, Princeton, New Jersey 08540. The dates for both the Scholastic Aptitude Test and the Achievement Tests are as follows:

November 4, 1989	March 31, 1990 (SAT only)
December 2, 1989	May 5, 1990
January 27, 1990	June 2, 1990

For information about the ACT, consult your high school guidance office.

Admission

Admission (Cont.)

4. *Good health and character.* Success in a church-related liberal arts college depends not only upon the type and quality of secondary school program completed but also upon health and good character. Good character includes such qualities as clean living, high aspirations, and industriousness. Applicants are expected to present evidence of them.

Procedure. Application for admission may be made upon the completion of the junior year in high school, and it should be made not later than June 1 of the year one wishes to enroll. Applications received after that time will be considered only if accommodations are still available. Those who wish to enter at the beginning of the Winter Term, the Interterm, or the Spring Term must file an application for admission at least thirty days in advance of the desired date of enrollment.

In order to obtain full and complete information concerning the achievements of applicants and their abilities to do college work, Bridgewater College will make use of the following methods:

1. *The application blank.* The application blank has been designed to provide information needed by the Admissions Committee. This blank may be obtained from the Office of Admissions. After it has been completely filled out, it should be returned to this office. This is the first step, and a very important one, to be taken by all who wish admission to Bridgewater College.
2. *The high school or secondary school transcript.* Upon receipt of the application blank properly filled out, the College asks the applicant's high school to furnish an official transcript of his academic record. Transfer students are required to submit official transcripts of their records at other institutions.
3. *Written recommendations.* Upon receipt of the application blank properly filled out, the College asks the applicant's guidance officer and his minister to provide a character rating or a letter of character recommendation.
4. *Personal interview.* Soon after the application blank has been sent in, any applicant who has not talked with an official representative of the College should arrange to come to the campus for a personal interview. This interview is conducted by a member of the admissions staff. Appointment for an interview may be made by telephoning or writing to the Director of Admissions.
5. *Health record.* Each applicant must present a written health report on a form supplied by the College. The form, properly executed, must be returned to the College before official registration can begin.

Each application is acknowledged by a letter from the Director of Admissions. As soon as the various data included in the application have been received and evaluated, the applicant is sent a note of acceptance or rejection. Inquiries from applicants are welcomed. Questions are answered and requested information is provided promptly.

Readmission. Students who are absent from the College for any ten-week term or longer; students who have withdrawn from the College for any reason; and students who have been suspended for a term must apply for re-admission to the Director of Admissions. If the applicant for re-admission withdrew for health reasons, a letter of recommendation and evaluation may be required from a professional clinician.

Transfer Credit. A student who has attended another accredited institution and is in good standing there may apply for admission to advanced standing not later than the beginning of the senior year. One who has attended an accredited two-year college may

transfer as many as 68 units of credit in courses comparable to those offered at Bridgewater College. Transfer students are expected to present official transcripts of their records at former institutions as well as any other information deemed necessary by the Admissions Committee. Normally, transfer credit is not allowed on courses bearing a grade of less than C. However, by special permission, depending on the circumstances, limited credit may be allowed on courses bearing a grade of D. For an explanation of quality point average, see page 105.

Advanced Placement. Credit and advanced placement is awarded to students on the basis of results on the Advanced Placement Tests of the College Entrance Examination Board, but subject in every instance to the approval of the department concerned and of the Council on Education. Advanced Placement Tests are available in English Composition and Literature, American History, European History, French, German, Spanish, Art, Music, Computer Science, Mathematics, Biology, Chemistry, and Physics. Students interested in taking one or more of these tests for the purpose of obtaining credit and advanced placement at Bridgewater should confer with the secondary school principal during their junior year or earlier and with the College upon application for admission.

The College considers the results of the College Level Examination Program as a means of determining advanced placement for students who have not followed the traditional pattern of preparation.

* * * * *

Bridgewater College strives to keep expenses at the lowest figure possible consistent with superior quality in education.

Student expenses are calculated on the basis of one inclusive fee covering all costs which are generally assessable to all students. The inclusive fee covers the cost of tuition, registration, student activity fees, library fee, medical fee, accident insurance, physical education fee, and all laboratory fees, excepting breakage deposits, plus room and board charges for residential students.

The accident insurance which is required of all students covers all medical expense incurred as a result of accidental bodily injury up to \$2,000 for each and every separate injury. This insurance is written for a twelve-month period and will be paid as stipulated regardless of where the student may be injured. All injuries must be reported to the Business Office before any claim can be satisfied. Sickness insurance is not covered in the inclusive fee, but it may be purchased at the option of the student for a reasonable cost (Approximately \$100.00 for the 1990-91 session.)

Expenses for the 1990-91 Session

	<i>Residential Students</i>	<i>Non-Residential Students</i>
Inclusive fee	\$12,480.00	\$8,520.00
Reservation Deposit		
New Students	400.00	200.00
Returning Students	200.00	100.00
Payments by students attending the entire academic year are due according to the following schedule. Students attending part of the year are referred to the statement on the Interterm.		
September 3, 1990	4,160.00	2,840.00
November 12, 1990	4,160.00	2,840.00
February 4, 1991	4,160.00	2,840.00

Admission (Cont.)

Expenses

Expenses (Cont.)

* The reservation deposit applies to the final payment for the Spring Term. For new students, it is due 30 days after admission and is non-refundable after May 1. Students admitted after May 1 must make a deposit within 10 days after admission. For returning students, the reservation deposit is due on April 1 and is non-refundable. Returning students who fail to make the deposit on time pay a penalty of \$25 and may not complete a preliminary registration, select classes, or reserve a room until the deposit and the penalty have been paid.

The College neither gives final examinations, grants a degree, nor issues grade report forms or transcripts of credits unless satisfactory arrangements have been made with the Business Office for payment of all fees.

The Interterm

Basic costs of the Interterm are borne within the charges assessed for the three main terms for students in regular ongoing attendance. Obviously, no refund is made to a student who chooses not to attend the Interterm. There are, of course, additional charges to the student enrolled in interterm experiences involving travel, off-campus housing, etc.

A student who attends two ten-week terms plus the Interterm pays one-third of the Basic Interterm Fee (see page 37) in addition to the two payments at the beginning of the ten-week terms. A student who attends one ten-week term plus the Interterm pays two-thirds of the Basic Interterm Fee in addition to the payment at the beginning of the ten-week term.

Part-Time Students

A part-time student (one who is permitted to register for five units or less in a ten-week term) who resides off campus, pays \$230.00 per unit of credit plus a Registration Fee of \$25.00 per term. A part-time student who resides on campus pays \$230.00 per unit of credit plus the same board and room rate plus student fees paid by all other resident students. Payment must be made at the time of official registration. A part-time student is not eligible to receive scholarship aid.

Special Fees

Overload—per unit of credit	\$ 60.00
Audit Fee—per unit of credit	40.00
Art Studio Fee	20.00
Supervised Teaching Fee (per week).....	10.00
Graduation Fee.....	25.00
Application Fee (paid only once; not refundable)	15.00
Late Registration Fee	10.00
Returned Check Fee.....	10.00
Transcript (first copy free)	2.00
Room with connecting bath per term (women only)	25.00
Room in Wakeman Hall or New Men's Residence Hall per term	50.00
Room in Blue Ridge Hall per term.....	35.00
Private room fee per term (if available)	175.00
Dormitory Key Replacement	5.00
Car Registration—Resident student	10.00
—Non-resident student	5.00
Identification Card Replacement	5.00
Placement Credentials (first copy free)	2.00

Basic Interterm Fee for students enrolled part of the year:

Resident student	1,170.00
Non-resident student	780.00
Audit Fee per course	100.00

Expenses (Cont.)

Deposits

Dormitory and Room Key Contingency Fee.....	\$ 100.00
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(Damage to dormitory and to dormitory furniture is charged to this deposit. The dormitory and room key deposit is made at the time the student first enrolls, and it is retained by the College until the student either graduates or withdraws. Returning students cover assessments that have been made against the deposit by bringing it back to the level of \$100.00 at the time of each fall registration. Failure on the part of the student to turn in his or her identification card, room key, or check-out slip at the end of each academic year will cause the deposit to be forfeited. Any unused portion of the deposit will be refunded at graduation or upon withdrawal from the College when identification card, room key, and check-out slip signed by the Director of Residence is presented to the Business Office at the conclusion of the student's attendance.)

Laboratory Breakage Fees:

Earth and Its Physical Resources	\$ 5.00
General Chemistry	5.00
Organic Chemistry	10.00

(Refunds will be made at the close of the session on unused balances.)

Private Instruction

Private instruction fees are in addition to tuition and overload charges.

Piano, Voice, and Wind Instruments:	Per Term
One lesson per week	75.00
Two lessons (same instrument) per week	140.00
Pipe Organ, one lesson per week	95.00

Variable Expenses

Each student pays for his own laundry, personal expenses, and books. Books cost approximately \$450.00 per year and may be purchased on a cash basis from the College Bookstore.

Withdrawal from College

To withdraw from Bridgewater College at any time during the academic year, a student must first confer with the Dean for Academic Affairs who will furnish the student with a form requiring the signatures of appropriate college personnel. A student who fails to withdraw properly will forfeit his or her dormitory and room key deposit and will receive failing grades in all currently enrolled courses.

Refunds

The College must contract for its faculty and other educational services a year or more in advance. Thus, only limited refunds can be made when a student withdraws from the College. Advance deposits are not refunded in any instance.

Expenses (Cont.)

In the event of approved withdrawal for health reasons, certified by a qualified physician, a refund of tuition and fees is provided according to the following schedule during the ten-week terms:

During the first two weeks of the term	80%
During the third and fourth weeks	50%
During the fifth and sixth weeks	20%
After the sixth week	No Refund

If a student withdraws for personal reasons during the first two weeks of a ten-week term and follows the official withdrawal procedures of the College, half of the tuition and fees will be refunded; during the third week, one-fourth. No refunds will be made after the third week.

The financial aid of a student who withdraws from the College for any reason will be reduced in accord with mandatory Federal guidelines. The financial aid adjustment will, of course, affect the actual refund amount the withdrawn student is eligible to receive. A student must begin the withdrawal procedures by requesting a conference with the Dean for Academic Affairs. All questions concerning refund amounts should be addressed to the Business Manager.

Methods of Payment

The inclusive fee for each term and fees for all part-time students are due according to the schedule on page 35. All financial aids administered by the College other than Supplemental Educational Opportunity Grants, and National Direct Student Loans are applied to the students' accounts at the rate of 30 percent in each of the Fall and Winter terms and 40 percent in the Spring term. Supplemental Educational Opportunity Grants, Basic Educational Opportunity Grants, and National Direct Student Loans as well as funds awarded under the Virginia Tuition Assistance Grant Program and the College Scholarship Assistance Program are applied to the students' accounts at the rate of one-third each term. Work aid is applied each term as earned.

Persons who prefer to pay the Inclusive Fee in equal monthly installments rather than the payment schedule as shown on page 35, may choose among several plans offered by various organizations. These organizations offer a Prepayment Plan which involves no charge for interest on an Extended Repayment Plan with interest charged at competitive rates. All plans offer life insurance for an insurable parent which covers the remaining portion of the student's contract in the event of the parent's death. Information concerning each of these plans will be mailed to all students during the spring. Information may be obtained in advance by writing to:

Academic Management Services, Inc.
1110 Central Avenue
Pawtucket, Rhode Island 02861

Richard C. Knight, Insurance Agency, Inc.
Insured Tuition Payment Plan
6 Saint James Avenue
Boston, Massachusetts 02116

The Tuition Plan, Inc.
Concord, New Hampshire 03301

Financial Assistance

Recognizing that college costs are of legitimate concern to many students, Bridgewater College utilizes some of its own resources and administers resources provided by

other agencies to provide a substantial and varied program of financial aid. While academic promise and potentiality for success, both on campus and beyond graduation, are requisites for all types of aid, the principal requisite is financial need.

Recipients of scholarships and financial aids are informed at the earliest possible date after the receipt of necessary applications and required information. However, no student is awarded financial aid until after admission to the College. Aid recipients are required to maintain records of satisfactory academic achievement and satisfactory personal conduct.

Application Procedures

Both returning and new student applicants for need-based institutional financial aid are asked to submit the Financial Aid Form (FAF) to the College Scholarship Service prior to March 15. A nominal fee is charged for this service. While there is no application fee required for Federal aid, College Scholarship Service charges a fee to provide an analysis which enables the Bridgewater College Financial Aids staff to determine a student's eligibility for need-based institutional funds.

All students seeking aid must be enrolled or accepted for enrollment on a full-time basis. Prospective students should submit the FAF no earlier than January 1, and no later than March 15. Since financial aid cannot be granted until a student has been officially admitted to the College, it is advantageous to submit your application for admission prior to the submission of your FAF in order to expedite an early response from the Office of Financial Aids. Financial aid packages are released to freshmen and transfers after March 15 on a rolling basis. Current students receive their aid packages after June 15.

Scholarships and Grants

From the scholarship fund, the following scholarships and grants are provided:

1. *President's Scholarships*—There are two levels of President's Scholarships. At the top level, a limited number of outstanding entering students are granted President's Merit Awards. Members of the Bridgewater Class of 1994 receive \$6,500 per year for four academic years, excluding summer sessions. Recipients from the Bridgewater College Classes of 1991, 1992, and 1993 receive \$5,000 per year for four years, excluding summer sessions. A President's Merit Award recipient must maintain a 3.50 cumulative quality point average in order to continue eligibility for this scholarship. To be considered and to be eligible to compete for a President's Merit Award, applicants must rank in the top five percent of their high school classes and have superior SAT or ACT scores.

At the second level, the recipients are known as President's Scholars. Members of the Bridgewater College Class of 1994 receive a stipend of \$5,000 per year for four years, excluding summer sessions. Recipients in the Bridgewater College Classes of 1991, 1992, and 1993 receive \$3,500 per year for four years, excluding summer sessions. A President's Scholar must maintain a 3.20 cumulative quality point average in order to continue eligibility for this scholarship. Applicants for President's Scholarships should rank in the top five percent of their high school classes and have excellent SAT or ACT scores.

Scholarship winners are chosen each year from among applicants for admission who have completed all application procedures and have participated in the College's scholarship competition. Recipients who have demonstrated financial need may receive additional aid by filing a Financial Aid Form with the College Scholarship Service.

**Financial
Assistance
(Cont.)**

2. *Honor Scholarships*—Recipients from the Bridgewater College Class of 1994, receive stipends of \$3,500 per year for four years, excluding summer sessions. Honor Scholars from the Bridgewater College Class of 1993 receive \$2,200 per year for four years, excluding summer sessions, and members of the Classes of 1991 and 1992 receive stipends of \$2,000 per year for four years, excluding summer sessions. An Honor Scholar must maintain a 3.00 cumulative quality point average in order to continue eligibility. To be considered for this scholarship, applicants must rank in the top ten percent of their high school classes and have competitive SAT or ACT scores. A transfer student from another accredited college who possesses a quality point average of 3.20 or higher and appropriate SAT or ACT scores and high school credentials may also be eligible for an Honor Scholarship.
3. *General Scholarships*—Recipients from the Bridgewater College Class of 1994, receive awards of up to \$1,000. Recipients in the Bridgewater College Classes of 1991, 1992, and 1993 are eligible for awards of up to \$500. Recipients are selected and renewed by the Financial Aids Committee. To be considered, entering freshmen must rank in the top 25 percent of their classes and demonstrate strong academic potential. After reviewing the student's cumulative grade point average each spring, the Committee decides whether or not to renew the award, which may be received for a maximum of four years.
4. *General Grants*—This is a need-based assistance program with a minimum value of \$500 and a maximum value dependent upon the level of financial need and academic achievement in high school. For upperclassmen the level of financial need and cumulative quality point average affect the annual award amount.
5. *Regional Grant*—Entering freshmen, transfer students and current Bridgewater upperclassmen who are graduates of high schools and residents of Rockingham, Augusta, Page, and Shenandoah Counties, or the cities of Harrisonburg, Staunton and Waynesboro, are eligible. It is renewable as long as the student's cumulative quality point average at the end of each Spring Term is at least 2.00 and the student has maintained a satisfactory citizenship record. A student who meets the stated criteria for both the Regional Grant and the Church of the Brethren Grant (see item 6) will be eligible to receive a Regional Grant only. The annual award is \$1,500 for a member of the class of 1991, 1992, or 1993; and \$2,000 for a member of the class of 1994.
6. *Church of the Brethren Scholarship*—Entering freshmen, transfer students, and current Bridgewater upperclassmen who are members of the Church of the Brethren are eligible for participation. Recipients of this grant must be admitted to the College and enrolled as full-time students. The grant is renewable as long as the student's cumulative quality point average at the end of each spring term is at least 2.00 and the student has maintained a satisfactory citizenship record. A student who receives a Regional Grant may not also receive a Church of the Brethren Grant. The annual award is \$1,500 for a member of the class of 1991, 1992, or 1993; and \$2,000 for a member of the class of 1994.
7. *National Assists*—The National Assists relate exclusively to students beginning with the Bridgewater College class of 1994 from beyond the Commonwealth of Virginia who do not qualify for Virginia's Tuition Assistance Grant program or for such special scholarships as the Foreign Student Scholar-

ships. The Assists, variable in magnitude and available for four years of attendance, endeavor to help students by compensating for the differences between any public grants which they may bring with them as entering students from their states of origin and the amount of Virginia's Tuition Assistance Grant. The maximum award is expected to be no less than \$1,500 for the 1990-91 academic session.

8. *Maryland Scholarships*—Income from the Blue Ridge College Fund provides a limited amount of money each year which is available for students from Maryland provided they are members of the Church of the Brethren and need financial assistance. The amount of each scholarship varies, depending on need. Applications from freshmen will be considered first. In case funds are available after all freshmen applicants have been considered, upperclassmen will be eligible provided evidence of need is presented.
9. *Foreign Student Scholarships*—The College offers twelve scholarships each year to students from foreign countries who enroll at Bridgewater College. These scholarships cover the amount of tuition for a regular session. The scholarship is renewable each year provided the applicant's achievement is satisfactory.
10. *Nursing Education Scholarship*—An annual scholarship of \$2,000, provided by the Brethren Health Education Foundation, will be awarded to a student studying in nursing education or the other healing arts. This scholarship is based on need and merit.
11. *Augusta County Scholarship*—This scholarship has a value of \$600 per year. It is derived from an endowed fund provided in 1954 by the Augusta County Alumni Chapter and will be awarded to a qualified applicant from Augusta County, Waynesboro, or Staunton. This recipient must present evidence of good character and of financial need.
12. *50-50 Plan*—Persons who are 50 years of age and older may enroll for credit with a scholarship equal to 50 percent of the tuition.
13. *Special Audit Program*—Persons who are 65 years of age and older or 60 years of age and retired may audit courses on a "space available" basis for a special audit fee of \$25.00 which includes the registration fee.

Named Scholarships

The money for scholarships comes from gifts by interested alumni and friends, from churches, and from the income of endowed funds. The list of named scholarship funds follows:

J. M. and Minnie Alexander Fund
Anonymous Donor—Organ Scholarship
Madeleine Long Arthur Memorial Fund
Bruce James Bandle Memorial Scholarship Fund
Bertha Megley Bergum Scholarship Fund
Dr. and Mrs. Edward C. Bixler Memorial Scholarship Fund
J. Ralph Bonsack Scholarship Fund
Anna Mary Bopst Shaw and Erma Bopst Bonsack Scholarship
Warren and Olive Bowman Scholarship
J. W., D. Newton, Christian Eller, and Cora Eller Bream Scholarship Fund

**Financial
Assistance
(Cont.)**

Bridgewater College Alumni Association Scholarship Fund
William L. Brown Scholarship Fund—Biological Sciences
Harry F. Byrd, Jr. Scholarship Fund
Christian Experience Summer Scholarship Fund (O. P. Williams Fund,
S. A. Harley Memorial, E. D. Flory Memorial, Lester D. Hoover
Memorial)
Clericus Fund
David and Effie Cline Scholarship Fund
Margie Ann Conner Scholarship Fund—Choral and Keyboard Music
Warren, Robert and Laura Craun Scholarship Fund
W. Burton Dillon Scholarship Fund
J. B. and Betty D. Dillon Educational Fund
John L. Driver Memorial Scholarship Fund
W. E. Driver Scholarship Fund
J. Alfred and Ada E. Duncan Scholarship Fund
Jesse Ball duPont Scholarship Fund—Christian Service
Evelyn V. Edmonson Memorial Scholarship Fund
Jessie Mae Conner Eller Memorial Fund
Mary and Charles Fifer Memorial Fund
The First Virginia Bank—Planters Scholarship
F. Bruce Forward, Jr. Scholarship Fund
Harold and Isabelle Garber Scholarship Fund
John E. and Mary Miller Glick, Sr. Endowed Scholarship Fund
Simon D. and Ruth L. Glick Scholarship Fund
John T., Effie Evers, and Paul Emerson Glick Memorial Scholarship Fund
H. L. Harris Endowed Scholarship Fund
J. W. Hines Scholarship Fund
Warren W. Hobbie Scholarship Fund
J. A. and Kittie Danner Hoover Scholarship Fund
Paul E. Hoover Scholarship Fund
Aaron M. Horst Scholarship Fund
Robert L. Hueston Endowed Scholarship Fund
Nelson T. Huffman Scholarship Fund
Rufus Bucher King and Wanda Hoover King Scholarship Fund
Donald Lester Kline Memorial Fund
John M. Kline, Jr. Family Memorial Music Scholarship Fund
Charles D. and Vergie C. Lantz Scholarship Fund
S. Floyd and Minnie Laughrun Scholarship
Edgar Leer Scholarship Fund
I. S. and Effie V. Long, Madeleine Long Arthur Scholarship Fund
Edward Lukens Scholarship Fund
Russel E. and Mary Zigler Mason Scholarship Fund
Lee and Ida Hinegardner May Scholarship Fund
A. D. and Emma Grace Miller Educational Fund
George W. Miller Family Scholarship Fund
John D. and Bertha Cline Miller Scholarship Fund
Lula A. Miller Endowed Scholarship Fund
Miller-Michael Music Scholarship
Naomi Mills Scholarship
Minna Mintzer Memorial Scholarship Fund
Kathryn Leigh Moore Memorial Fund
Abner H. and Eunice Naff Myers Scholarship



**Financial
Assistance
(Cont.)**

John C. Myers Memorial Scholarship
 Mark Early Myers, Sr. and Dorothy Miller Myers Scholarship Fund
 Minor Myers Ministerial Scholarship Fund
 Richard D. Obenshain Memorial Fund—Public Service
 Pixie Perdue Scholarship Fund—Nursing Education
 Esther Mae Wilson Petcher Memorial Scholarship
 Merlin K. Peterson and Mary K. Simmons Memorial Scholarship
 Pleasant Hill Church of the Brethren Scholarship Fund
 Charles E. and Anna M. Resser Memorial Scholarship Fund
 David L. Rogers Scholarship Fund
 Jesse Edward Rolston Fund
 Earnie J. and Viola Rowe Scholarship Fund
 H. Edgar and Mary E. Royer Memorial Scholarship Fund
 Helen Early Ruby Memorial Scholarship Fund
 Scherrfig (Sherfey) Family, J. Arthur and Dora Clark Allison Scholarship
 Fund
 Dora V. Schmidt Scholarship
 Victoria Weybright Shoemaker Scholarship
 The Randall, Anna Snader and Gretchen Pittinger Spoerlein Endowment
 David G. and Margie Messick Smith Scholarship Fund
 Mary Hoover Smith Scholarship Fund
 Ruth Weybright Stauffer Organ Scholarship Fund
 Virginia Garber Cole Strickler Memorial Fund
 Jacob and Lottie Thomas Scholarship
 Orland "Jack" Wages Bridgewater Rotary Scholarship Fund
 Benjamin O. and Crystal Driver Wakeman Scholarship Fund
 Charles W. Wampler, Sr. Scholarship Fund
 Fred J. and Ernest M. Wampler Family Scholarship Fund
 John B. Wampler Endowed Scholarship Fund
 Rowland and Ethel T. Whitehair Endowed Scholarship Fund
 Lettie Pate Whitehead Scholarship
 John Eugene Wine Endowed Scholarship Fund
 William E. and Margaret K. Wine Endowed Scholarship Fund
 Gloria Bohn Wilson Endowed Scholarship Fund

Financial Assistance (Cont.)

Work Opportunities

The College employs quite a number of students to perform services about the buildings and campus. The positions available involve such services as library, laboratory, and office assistants; waitresses; janitors; and campus workers. The positions are assigned to applicants who are qualified to render the required services. However, need is considered and upperclassmen are given priority. The applicant for a position files a written application with the Director of Financial Aids.

Commonwealth of Virginia Financial Aids

1. *Virginia Tuition Assistance Grant*—The amount of a Virginia Tuition Assistance Grant, dependent upon a level of funding by the Virginia General Assembly, is independent of the financial status of the student and his or her family. During the 1988–89 academic session the value of this grant is \$1,450. To be eligible, the student must be a legal resident or domiciliary of Virginia. The deadline to apply is June 1, and application forms are available from the Financial Aids Office.
2. *College Scholarship Assistance Program*—To apply for this grant, a Financial Aid Form (FAF) must be submitted by March 15 to the College Scholarship Service. Bridgewater College will prepare a list of nominees from the applicant pool for approval by the State Council of Higher Education. State regulations require the minimum award amount to be \$400 with the maximum at \$2,000.

Federal Government Financial Aids

Following is a brief description of the financial aid programs made available by the Federal Government for students who are citizens or permanent residents of the United States. A student applying for aid under these programs, except for Veterans Benefits, must demonstrate financial need and maintain satisfactory academic progress standards. The Financial Aid Form is the document which provides information about financial need. The amount of financial need is an important factor in whether the aid applicant is selected for participation in these programs. All freshmen and transfers are considered to be making satisfactory academic progress based upon their admission to the College. However, after that point, satisfactory progress is measured by standards relating to hours earned and a cumulative quality point average. For further information see the College's financial aid brochure.

1. *Perkins Loan*—Students in need of financial aid may borrow up to \$4,500 in their first two years of college and up to \$9,000 in their undergraduate years. Repayment begins nine months after a student discontinues college enrollment for new borrowers after July 1, 1987, and six months for previous borrowers. The interest is five percent and repayment may be extended over a ten-year period.
2. *Pell Grant*—Authorized under the Higher Education Amendments of 1972, eligible undergraduate students may receive a Pell Grant ranging from \$250 to \$2,300. The exact amount of the award is determined by the Student's Aid Index which can be found on the Student Aid Report (SAR). Before any payment can be made for the student, all three copies of the SAR must be given to the Financial Aid Office.
3. *Supplemental Educational Opportunity Grant*—Under the Higher Education Act of 1965 and subsequent amendments, funds are available to colleges and

universities for the purpose of providing scholarships to undergraduate students who show financial need. Awards vary from \$100 to \$4,000. Applicants must show academic or creative promise and must maintain satisfactory academic progress. Grants may be renewed from year to year for the first four years of undergraduate work provided: (1) the student continues to be in satisfactory academic progress, (2) financial need continues to be demonstrated, and (3) funding continues at a level which will sustain it.

4. *College Work-Study Program*—A number of job opportunities on campus can be filled by applicants who meet the provisions of this federally subsidized employment program. An applicant must be a full-time student or accepted to enroll as a full-time student, must have substantial financial need, must apply the wages earned toward college expenses, and must work under hours and conditions established by government regulations. Fifteen hours per week is a maximum work load without special permission.
5. *Veterans Benefits*—Students qualifying may use their benefits toward any program provided by Bridgewater College. While information concerning these benefits is available at the Office of Admissions, it is suggested that those interested confer with a representative of the Veterans Administration.

Student Loan Funds

1. *Stafford Loans*—The money is borrowed by the student from participating home town financial institutions with an interest rate presently of eight percent. Interest does not accrue while the student is enrolled on at least half time status. The maximum amount is \$2,625 per academic year for freshmen and sophomores. Juniors and seniors may not exceed \$4,000 per academic year. Because the GSL is need-based, renewal loan amounts vary according to the need of the student. Repayment of the loan begins six months following graduation or termination of at least half-time student status. Interested students should contact their home town lending institution.
2. *Parent Loans to Undergraduate Students*—A federal loan program designed to assist parents, independent students, and spouses to borrow money to pay for the student's undergraduate educational expenses. The interest rate varies and is currently twelve percent and the loan amount may be up to \$4,000 per academic year. Repayment begins within 60 days of loan disbursement. See your local bank for the appropriate application form.
3. *Bridgewater College Loan Fund*—A substantial fund has been established by numerous friends of the College to be loaned to worthy students who are especially in need of aid and whose character justifies it. The policy is to loan up to \$300 to sophomores, \$400 to juniors, and \$500 to seniors. Loans are made on a low rate of interest during the time the student is enrolled in college. The student is required to apply for a loan and give a note with parent's endorsement as security for the loan. Written applications must be filed with the Director of Financial Aids.
4. *Church of the Brethren Loan Fund*—The General Board grants a limited amount of its Rotary Loan Fund to each college affiliated with the Church of the Brethren for low interest-rate loans to students who are members of the Church of the Brethren. The appropriate forms may be obtained from the Office of Financial Aids.



Some students—they are the fortunate ones perhaps—enter college having firmly decided on a vocation; many others enter knowing only in a general way what their vocational interests are. Specific suggestions about programs of study which will aid students in the former group to attain their various professional goals follow. The latter students are reminded that one of the purposes of a liberal education is to introduce them to varied fields of knowledge, and so give them a sound basis on which to make a wise career choice. At Bridgewater, students who have not chosen a field in which to concentrate can secure expert counseling from the career planning staff and from advisers and department heads who will take a strong personal interest in them.

For the Student Going Into Business

A four-year curriculum leading to the Bachelor's Degree in either business administration or economics is provided.

For the Student Going Into Computer Science

Completion of a curriculum leading to a Bachelor's Degree with a major in computer science and mathematics prepares one to enter graduate study in computer science or to pursue employment in this rapidly expanding field.

For the Student Going Into Dentistry or Pharmacy

Admission to schools of dentistry and pharmacy may be obtained without the completion of the baccalaureate degree requirements. It is strongly urged, however, that students planning to enter either of them take the four-year program with a major in general science and secure the Bachelor's Degree as a background for the work of the professional school.

For the Student Going Into Engineering

A dual degree program is offered in cooperation with The Pennsylvania State University or Georgia Institute of Technology. A student who completes ninety units at Bridgewater College, including the general education requirements and the requisite courses in science and mathematics, may be admitted to Penn State or G.I.T. where, in two additional years, the Bachelor's degree in one of several engineering fields may be earned at the same time a Bachelor's degree in liberal arts is earned at Bridgewater College. Those interested in this program should consult with the Dean for Academic Affairs and the Chairman of the Chemistry Department or the Chairman of the Physics Department.

For the Student Going Into Forestry

A dual degree program is offered in cooperation with the School of Forestry and Environmental Studies at Duke University. A student who completes ninety units and the general education requirements at Bridgewater College may seek admission to this school. While the student may enter the School of Forestry and Environmental Studies with a

**Career
Opportunities**

Career Opportunities (Cont.)

background in one of several major fields, the student's program of studies must include Biology 201, 202; and Mathematics 130 or 132. Recommended courses are Computer Science 101, 105, Economics 210, and Mathematics 200. Those interested in this program should confer with the Dean for Academic Affairs and the Chairman of the Department of Biology.

For the Student Going on to Graduate School

Bridgewater men and women planning careers in research, in the professions, or as college and university teachers enter the leading graduate schools in the United States each year to pursue work leading to the M.A., the Ph.D., or to some professional degree. Students interested in pursuing graduate studies should consult with their faculty advisers concerning appropriate preparation and application procedures.

For the Student Going Into Government Service

Completion of a curriculum leading to the Bachelor's Degree, provided a suitable major and area of concentration have been selected, qualifies a person for some positions in government. A student interested in government service should confer with the appropriate faculty adviser.

For the Student Going Into Home Economics

Completion of a curriculum with a major in home economics prepares the student for entrance into the following careers: retailing and merchandising, demonstration of food and textile products and of household equipment, nutrition, food service and management, public school teaching, and homemaking.

For the Student Going Into Law

Students seeking to pursue a career in law need an education which prepares them to read effectively, to write clearly, and to think analytically. An excellent general education and a concentration in any one of several fields provide the preparation needed. College debate experience and an internship in a law office in the junior or senior year can give valuable added preparation. Students who are interested in a career in law should confer with the Dean for Academic Affairs, their faculty adviser, and Professor Lamar B. Neal, Pre-Law Adviser.

For the Student Going Into Medical Technology

Bridgewater College offers a bachelor's degree program with a major in Medical Technology in which the student studies three years at Bridgewater and twelve months at an accredited school or department of medical technology. See page 54 for details.

For the Student Going Into Medicine

Completion of a curriculum containing a concentration in chemistry, biology, or general science is recommended. Because admission to medical school is highly competitive, the student is advised to plan with his or her faculty adviser a program of studies which will provide the best possible preparation for the Medical College Admissions Test.

For the Student Going Into the Ministry or Religious Education

Completion of a curriculum leading to the Bachelor's Degree, provided a suitable major and concentration have been selected, qualifies a student adequately for admission to a theological seminary, for teaching religious education, or for doing church work.

For the Student Going Into Social Work

A four-year program with a concentration in sociology leading to the Bachelor's Degree is recommended for those who wish to enter social work following graduation from college as well as for those who wish to pursue a graduate program in preparation for social work.

For the Student Going Into Teaching

The College offers four-year curricula leading to the Bachelor's Degree and a State-Approved Program of teacher preparation at the kindergarten, elementary, and middle school levels as well as in several secondary fields. A student completing this program may be certified to teach in more than twenty states.





Freshmen courses are numbered 100–199; sophomore courses 200–299; and junior and senior courses 300–500. Course descriptions listed herein apply to the 1990–91 academic year.

Within each course title is a number followed by one or more letters. The number designates the units of credit granted for the course, and the letters indicate when the course is offered: F stands for Fall Term; W for Winter Term; I for Interterm, and S for Spring Term. The College reserves the right to alter the schedule of courses as circumstances dictate.

Except for Internships, Independent Studies, Research, and Honors Projects, the courses of instruction are organized by departments. Opportunities for qualified students to engage in Internships, Independent Studies, Research, and Honors Projects are available in each department.

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480. Internship (3FWIS)

The internship program of the College provides an opportunity for a student to gain field experience in an area related to the student's concentration or career goals. Supervision of an intern is provided by an appropriate faculty member and by a staff member of the agency or business in which the student is an intern. A student who wishes to engage in an internship must consult with the appropriate faculty member at least eight weeks in advance of the start of the term in which the internship is to be done. A description of the internship, signed by the student and the faculty sponsor, must be filed with the Director of Internships at least 20 days prior to the start of the internship. All internship projects must be approved by the Council on Education prior to the beginning of the term. To be considered for an internship, a student must have junior or senior status and at least a 2.00 quality point average. A student may enroll in an internship program for three units of credit in a term, and internship credit may be earned in subsequent terms subject to the limitations that no more than two internships may be pursued in any one agency or business and a maximum of nine units of credit in internships may be applied toward graduation.

490. Independent Study; 491. Research (3FWIS)

Upon approval of the Department and the Dean for Academic Affairs, a student with a cumulative quality point average of 2.20 or better may engage in an independent study or research project. One desiring to pursue independent study or research must submit a written description of the proposed work to the chairman of the appropriate department and to the Dean for Academic Affairs twenty days prior to the beginning of the term in which the study is to be conducted. All independent studies and research projects must be approved by the Council on Education prior to the beginning of the term. At the end of the term, the supervising professor will file with the Registrar a grade for the student and a description of the work accomplished. Credit may be received for not more than three independent studies or research projects.

Independent Studies

**Independent
Studies
(Cont.)**

500. Honors Project (3FWIS)

An Honors Project is one in which a student researches a subject, by examination of relevant literature or by experimentation or both; the student reports the results in an accurately documented and well-written paper or appropriate representation of the work. Whenever the study deals with the subject of an established course, the student is expected to go well beyond the usual work of the course in research and in assimilation of the results as revealed in the report. Juniors and seniors with a cumulative quality point average of 3.20 or above may register for an Honors Project. One desiring to pursue an Honors Project must submit a written description of his or her proposed work to the chairman of the appropriate department and to the Dean for Academic Affairs 20 days prior to the beginning of the term in which the study is to be conducted. All Honors Projects must be approved by the Council on Education prior to the beginning of the term. At the conclusion of the Honors Project, the supervising professor files with the Registrar a grade for the student and a description of the work accomplished, and with the Library Director a copy of the written paper or appropriate representation of the work. It is the student's responsibility to provide the materials for the library in compliance with specifications approved by the Council on Education. The Library Director will arrange for binding and storage.

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Art

A major in Art consists of courses numbered 111, 112, 211, 218, 231, 232, 311, 312, 321, 322, 430, 460 and either 401 and 402, or 411 and 412, or 421 and 422. The requirement in applied art includes a senior show and gallery critique.

A minor in Art consists of courses numbered 111, 112, 211, 218; either 311 or 312; either 321 or 322; and two of the following: 231, 232, 245, 300, 430.

111, 112. Art Structure (3F, 3W)

First term: Two-dimensional problems in composition and properties in color. Second term: geometric and organic form in three-dimensional compositions.

211. Drawing (3F)

Emphasis upon life drawing in dry media which can serve as a basis for more personal and abstract development. The student is encouraged to develop compositional possibilities in abstract forms with the emphasis on color and/or wet media.

213. Basic Photography (3I)

Techniques in the use of 35 mm cameras, black and white films and printing papers, and photochemicals. Basic exploration of composition, pre-visualization, and experimentation in image selection. A survey of the history of photography from the 1800s to the present is also included.

214. Sculpture With Steel (3I)

Manipulation of steel toward sculptural ends. Various forms of the metal will be used with basic hand and power tools including the oxyacetylene welder.

218. Introduction to Printmaking (3S)

Development of the woodcut and etching media from design to the completed print. Prerequisite: Art 111, 211, or permission of instructor.

231, 232. Art History (3F, 3W)

A survey from the prehistoric era through the 19th century. The emphasis is on painting, sculpture, and architecture. First term: Prehistoric to Renaissance. Second term: Renaissance through 19th Century.

300. Aesthetics (3F)

Philosophical nature of art from prehistory to the present. Topics considered are the

Art (Cont.)

basis for defining beauty, artistic style, and the role of the artist in society. A survey of such terms and trends as iconography, classicism and symbolism will be conducted through slides, lectures, and research. Alternate years; offered 1991–92.

311, 312. Beginning Painting (3W, 3S)

Introduction to the basic craft of constructing and priming canvas, use of medium and oil pigments, and development of the evolutionary process of completing compositions. Personal direction is given each student.

321, 322. Beginning Sculpture (3F, 3W)

Introduction to basic sculptural techniques: modeling, casting, carving, constructing, in a variety of materials including clay, plaster, wood, and metal.

335. Art of Greece and Italy (3I)

A travel course in Greece and Italy focusing primarily on Athens, Rome, and Florence. Daily excursions are made to museums and architectural sites, including palaces, temples, churches, and ancient ruins. Emphasis is placed on Greek, Etruscan, and Roman cultures and the Italian Renaissance period. Prerequisites: Art 231 or 232, and permission of instructor.

401, 402. Advanced Drawing (3W, 3S)

Continued development in selected media for an emphasis in this area. Prerequisite: Art 211.

411, 412. Advanced Painting (3W, 3S)

Exploration of a wide range of painting techniques and media, with at least one term devoted to the acrylic pigments. Prerequisite: Art 311, 312.

421, 422. Advanced Sculpture (3F, 3W)

Exploration of a variety of sculptural materials. The student is encouraged to experiment with contemporary construction methods as well as further application of traditional processes. Prerequisite: Art 321, 322.

430. Art History: Twentieth Century (3S)

Survey of the development of the arts from the Fauve and Cubist movements to the present. Prerequisite: Art 232.

450. Special Project (3FWIS)

Completion of drawings, paintings, or sculptures through concentrated effort on the part of each student. An appropriate project is chosen with the approval of the professor. Prerequisite: Junior or Senior art major.

460. Seminar (3S)

Various philosophical and critical essays related to twentieth-century works from various texts and periodicals. Includes critiques based upon field trips to museums and galleries for special exhibitions. Prerequisite: Permission of the department.

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A major in Biology consists of a minimum of 32 units of course work within the department including 201, 202, 203, 314, 341, 350 and 430. Supporting courses required for the major are Chemistry 142, 143 and Mathematics 120 and 130.

A major in General Science consists of 48 units including Chemistry 142, 143, 201, 202, 203; Physics 221, 222; Mathematics 120, 130; Biology 201, 203, plus six units in Biology courses numbered 300 or above. This major is designed primarily for pre-medical and pre-dental students and for prospective teachers of general science and cannot be taken as a dual major with a major in Biology.

Biology

**Biology
(Cont.)**

A major in Medical Technology requires a student to complete three years of study at Bridgewater College and a twelve-month program in a school or department of medical technology. In the three-year curriculum at Bridgewater College, the student must earn 91 units of credit with a cumulative quality point average of 2.00, fulfill the general education requirements of the College, and earn an average of 2.00 on the following courses: Biology 201, 203, 300, 314, 400, 410; Chemistry 142, 143, 201, 202, 203; and Mathematics 120, 130. In the fourth year of the program, the student must complete the prescribed program in a school of medical technology which is accredited by the National Accrediting Agency for Clinical Laboratory Sciences, and earn at least the equivalent of 32 semester units of credit with a 2.00 quality point average.

A minor in Biology consists of Biology 201, 202, 203, 341, and 350. Supporting courses required for the minor are Chemistry 142, 143, and Mathematics 120 and 130.

Biology 201 or permission of the instructor is prerequisite to all courses in the department numbered 300 or above except those offered in the Interterm and Biology 420 and 425.

100. The Nature of the Biological World (4FWS)

Basic life processes, the organization of life, and of life at the subcellular, cellular, organismal, and community levels. A course designed for the non-science major. Four lectures and one laboratory per week.

201. Introductory Biology-Life at the Subcellular and Cellular Level (4S)

An introduction to the study of biology emphasizing subcellular molecular aspects of the science, the organization of life at the cellular level, and the implications of this knowledge in understanding of life in multicellular organisms. Four lectures and one laboratory per week. Prerequisite: Chemistry 141 or 142 or permission of the instructor.

202. The Biology of Plants (4F)

A survey of the plant kingdom and introductory work in plant science. Four lectures and one laboratory per week.

203. The Biology of Animals (4W)

Survey of the animal kingdom and introductory work in zoological science. Four lectures and one laboratory per week.

205. The Biology of Horses (3I)

An introduction to morphology, physiology, genetics, and reproductive biology, using the horse as the object of study. Elements of applied animal behavior, breed variations, nutrition, disease pathology, and livestock management will be illustrated during the field trips, which will include visits to the Maryland-Virginia Regional College of Veterinary Medicine, the Virginia Equine Research Center, the Eastern Regional Veterinary Pathology Laboratory, and selected horse breeding farms in central and western Virginia.

216. Human Genetics (3I)

Application of genetics to the human population including familial genetics, cytogenetics, population genetics, medical genetics, genetics counseling, and pedigree analysis. Prerequisite: Biology 100.

300. Microtechnique (3I)

Elementary procedures in the preparation of plant and animal tissues for study and research. Prerequisite: Chemistry 142. Two laboratories per week plus additional individual laboratory work.

305. Introduction to Human Anatomy (3F)

A study of the structure and function of the human body. Emphasis is placed upon the skeletal, muscular, circulatory, respiratory, nervous, and digestive systems.

310. Histology (3W)

A systematic treatment of the microscopic structure of tissues, organs, and organ systems of vertebrates.

314. Mammalian Physiology (4S)

The function of the organ systems of the mammalian taxon, including humans. Four lectures and one laboratory per week.

315. Plant Physiology (3W)

The physiology and biochemistry of plants. Topics include: water relations, growth regulators, metabolism of primary and secondary compounds and photosynthesis. Prerequisite: Biology 201. Alternate years; offered 1991–92.

341. Genetics (4F)

A balanced approach (classical and molecular) to the study of all aspects of heredity. Four lectures and one laboratory per week.

343. Plant Genetics (3W)

Applications of laws of genetics to plants. Emphasis is placed upon how genetic techniques are applied to crop improvement. Topics include: recombinant DNA technology, polyploidy, hybridization and introgression and quantitative genetics. Prerequisite: Biology 341. Alternate years; offered 1990–91.

350. Ecology (4F)

Living organisms in the community. The study of ecosystems and the delicate natural balance required for their continued viability. Four lectures and one laboratory per week.

352. Ecology of the African Savanna (3I)

An introduction to ecological processes. The African Savanna ecosystem is used as a model of a well integrated ecological community structured by biotic interactions such as competition and predator prey relationships. Other topics include physical geography, seasonality, primary production, trophic structure (food chain), and the evolution community structure. Fourteen days are spent off-campus to travel to Kenya and spend about ten days on the African Savanna observing wildlife in their natural habitat: wildebeest, zebra, gazelles, elephants, and lions.

375. Marine Biology (3S)

An introduction to the marine environment. Emphasis on basic ecological concepts, the biota of marine communities, and the role of the seas in the origin and early evolution of life. The human impact on marine environments is examined. Three lectures and one laboratory per week.

380. Biology of the Volcanic-Coral Islands (3I)

The history, flora, and fauna of Bermuda and its surrounding waters. The first week is spent on the Bridgewater campus where instruction on island communities is given. Students are introduced to snorkeling. The last two weeks are spent in residence at the Bermuda Biological Station for research, St. George's, Bermuda. During this interval students become conversant in the natural history of the islands and with pertinent research now taking place in marine biology. Lectures are given by staff members of the station and by government officials.

400. Microbiology (4W)

An introductory survey of microbiology with emphasis on bacteriology. Three lectures and two laboratories per week.

405. Biochemistry (3W)

(See Chemistry 405.)

**Biology
(Cont.)**

- 410. Immunology (3I)**
Development of immune responses through humoral and cell-mediated mechanisms with special emphasis on hypersensitivity reactions, artificial immunity, and serology. Prerequisite: Biology 203.
- 411. Comparative Vertebrate Embryology (4F)**
A comparative study of vertebrate embryos, including the frog, chicken and pig. Three lectures and two laboratories per week.
- 412. Comparative Vertebrate Anatomy (4W)**
A comparison of the anatomy of adult vertebrates and their evolutionary adaptations. Three lectures and two laboratories per week. Prerequisite: Biology 411.
- 425. The Summer Flora (4Sum)**
A survey of vascular flora of the Shenandoah Valley and the adjoining mountain ranges.
- 430. Evolution (3W)**
A study of organic evolution: its historical development, as well as the processes of variation, natural selection, speciation and the origin of life. Four lectures per week.
- 460. Special Topics (3FWIS)**
Studies from the areas of physiology, genetics, ecology, plant systematics, plant anatomy or plant physiology, and invertebrate zoology or entomology. Prerequisite: Permission of the department. Offered on demand.

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Chemistry

A major in Chemistry consists of Chemistry 142, 143, 201, 202, 203, 301, 302, 311, 312, 313, 411, 412, and two courses chosen from the following: Chemistry 303, 405, 430, and 440. Supporting courses required for the major are Physics 221, 222; Mathematics 131, 132. Biology 201 is strongly recommended. Students wishing to pursue further study in Chemistry are encouraged to take additional courses in Biology, Computer Science, Mathematics, Physics, and Foreign Language (preferably German or French).

A major in Physical Science consists of Chemistry 142, 143; Mathematics 120, 131, 132, 231, 232; Physics 221, 222, 340, 460; and six additional courses numbered 300 or above chosen from among the Departments of Chemistry and Physics. This major is designed primarily for pre-engineering students and cannot be taken as a dual major with a major in chemistry or a major in physics.

A minor in Chemistry consists of Chemistry 142, 143, 201, 202, 203, eight additional units in Chemistry numbered 300 or above, Physics 221, 222; Mathematics 131, 132.

- 102. The Earth and Its Physical Resources (4S)**
History of the earth's changes and its present structure, the availability of resources for human's uses, and the effects of pollution. Four hours lecture and one laboratory per week.
- 141. General Chemistry I (4F)**
Atomic structure, nomenclature, periodicity, and stoichiometry. Four hours of lecture and a minimum of three hours of laboratory per week.
- 142. General Chemistry II (4W)**
Orbitals, bonding, thermodynamics, kinetics, colligative properties, nuclear chemistry, and inorganic qualitative analysis. Four hours lecture and a minimum of three hours of laboratory per week. Prerequisite: Chemistry 141 or permission of instructor.

143. General Chemistry III (4S)

Acids and bases, electrochemistry, compounds of the elements, and quantitative analysis. Four hours lecture and a minimum of three hours of laboratory per week. Prerequisite: Chemistry 142 or permission of instructor.

165. Drugs and the Human Body (3I)

Uses and abuses of legal and illegal drugs and their effects on the human body. An examination of "over-the-counter" drugs like aspirin, acetaminophen, and drama-mine, as well as narcotics like morphine and illegal drugs like heroin and LSD. Field trips to a drug rehabilitation clinic and a pharmaceutical laboratory are included.

201, 202, 203. Organic Chemistry (3F, 3W, 3S)

Structure, nomenclature, reaction mechanisms, synthesis, and identification of organic molecules. Three hours lecture and a minimum of three hours laboratory per week. Prerequisite: Chemistry 143 or permission of instructor.

301, 302. Physical Chemistry (3F, 3W)

Physical states of chemical systems and transitions between those states: their thermodynamics (including equilibria), reaction rates, electro- and photo-chemistry, and solution phenomena. Four hours lecture per week. Corequisites: Chemistry 311 and 312. Prerequisite: Chemistry 203 or permission of instructor, Math 132 and Physics 222.

303. Physical Chemistry (3S)

Atomic structure and chemical bonding based on applications of Schrodinger's Equation to structures of chemical interest. Four hour lecture per week. Prerequisite: Chemistry 302 or permission of instructor. Alternate years; offered 1991-92.

311, 312, 313. Chemical Techniques (1F, 1W, 1S)

Chemical literature and basic methods used in compound identification and purification. One hour lecture and a minimum of three hours laboratory per week. Corequisite: Chemistry 301 or 302.

405. Biochemistry (3W)

Chemistry and metabolism of carbohydrates, proteins, lipids, nucleic acids, enzymes, vitamins, and minerals. Four hours of lecture per week. Prerequisites: Chemistry 203 and Biology 201.

411, 412, 413. Advanced Chemical Techniques (1F, 1W, 1S)

Continuation of Chemistry 311-313. Instrumental analysis including spectroscopy, spectrometry, chromatography, and electrochemistry. One hour lecture and a minimum of three hours laboratory per week. Prerequisite: Chemistry 313 or permission of instructor.

430. Physical Organic Chemistry (3F)

Molecular orbital theory, reaction kinetics, photochemistry, and organic name reactions. Four hours lecture per week. Prerequisite: Chemistry 203 and Mathematics 132.

440. Advanced Inorganic Chemistry (3W)

Physical properties, electronic structure, and reactivity of main group and transition metal inorganic compounds. Four hours lecture per week. Prerequisite: Chemistry 301.

**Chemistry
(Cont.)**

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and Business**

445. Instrumental Analysis (3I)

Survey of classes of instruments which are used in analysis of chemical systems. Several specific methods (such as Electron Paramagnetic Resonance and Differential Scanning Calorimetry) which are not otherwise covered in the Chemistry curriculum are included. Field trips are made to laboratories at the University of Virginia, the National Institutes of Health, and Merck and Company to observe use of scientific instrumentation and data analysis facilities in both academic and industrial settings.

450. Special Topics (3FWIS)

Devoted to a subject taken from a field of chemistry not otherwise covered in the curriculum. If a different topic is offered, the course may be repeated for credit. Prerequisite: permission of instructor.

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A major in Economics consists of Economics 200, 210, 410, 412, and 12 additional units in Economics numbered 300 or above; Business 201, 202; and Mathematics 120, 130, and 200.

A major in Business Administration consists of Economics 200, 210, and nine additional units in Economics numbered 300 or above; Business 201, 202, 370, 410, 420, 440, three additional units in Business numbered 300 or above; and Mathematics 129 and 200.

Students seeking to sit for the Uniform CPA Examination in the Commonwealth of Virginia must take Business 301, 302, 310, 320, 330 and 340 in addition to completing a Business Administration major.

A minor in Economics consists of Economics 200, 210, 410, 412, and six additional units numbered 300 or above. Supporting courses required for the minor are Mathematics 200 and either Business Administration 201 and 202 or Mathematics 120 and 130.

A minor in Business Administration consists of Business 201, 202, 370, 410, 420, 440 and three additional units numbered 300 or above. Supporting courses required for the minor are Economics 200 and 210 and Mathematics 129 and 200.

Students seeking preparation in International Business should combine a major or minor in Business Administration with as much Foreign Language study as is feasible, preferably including a Foreign Language major and participation in Brethren Colleges Abroad (see page 26).

Economics 200 or the instructor's permission is prerequisite to all other Economics courses.

ECONOMICS

200. Principles of Macroeconomics (3FWS)

Elements of supply and demand, followed by analysis of aggregate economic phenomena, including the determination and behavior of national income, employment, the price level and international trade. This course meets the needs of the non-major wishing to develop a general understanding of economics.

210. Principles of Microeconomics (3FS)

Analysis of individual choice and markets, with special emphasis on price and output relationships and the economics of the firm.

300. Money and Banking (3FW)

Theory and applications concerning the financial system, interest rates, monetary institutions, the money supply and monetary policy.

307. Contemporary Economic Issues (3I)

An examination of contemporary economic issues from conservative, liberal and radical perspectives. Topics include both microeconomics and macroeconomic issues. Prerequisite: Economics 210 or permission of instructor.

310. Economic History of the United States (3S)

Economic growth and development of the United States from the colonial period to the present; the use of economics to explain and understand history.

320. Labor Economics (3S)

Analysis of labor markets, including labor supply and demand, wages and salaries, collective bargaining, macroeconomic implications of labor markets, and discrimination.

410. Intermediate Microeconomic Theory (3F)

Theoretical development of consumer choice, firm behavior, price and income determination, and market behavior.

412. Intermediate Macroeconomic Theory (3W)

Theoretical development of the determinants of national income, employment, aggregate prices and other economy-wide variables.

420. Development of Economic Thought (3F)

History of economic reasoning and theory from pre-Classical thought to the present, with special attention to the important concepts and contributions of the various schools.

430. Comparative Economic Systems (3W)

Analysis of alternative systems of organizing economic activity. Market and command economics as well as mixed variations of each system are explored.

440. International Economics (3F)

Theory of international economic relations, including trade, finance, and monetary policies and institutions.

450. American Industrial Structure and Public Policy (3W)

The role of government and market forces in promoting efficient economic results. The course focuses on antitrust policy, economic regulation and social regulation.

BUSINESS

100. Introduction to Business (3FWS)

Survey of business organization and management, including an introduction to each of the functional fields of business.

201, 202. Principles of Accounting (3FS, 3WS)

First term: Accounting for sole proprietorships and partnerships, accounting cycle, journals, ledgers, working papers, and preparation of financial and operating statements. Second term: Accounting for corporations; analysis of financial statements and budgets as well as managerial accounting. Business 201 is prerequisite to 202.

203. Personal Finance (3I)

Principles of managing one's income with emphasis upon budgeting, saving, borrowing, insurance, home buying, and taxes.

301, 302. Intermediate Accounting (3W, 3S)

Preparation and analysis of financial statements, concentrating on accounting for corporations. Prerequisites: Business 202, Math 129. Business 301 is prerequisite to 302.

- 310. Federal Tax Accounting (3F)**
Introduction to the federal tax structure; application of the tax code and preparation of returns. Prerequisites: Business 202, Math 129.
- 320. Auditing (3S)**
Theory and practice of auditing; the functions, standards and ethics of the public accounting profession. Prerequisite: Business 301.
- 330. Cost Accounting (3F)**
Principles of process and job order cost accounting, with specific application to the support of business decisions. Prerequisites: Business 202, Math 129.
- 340. Advanced Accounting (3W)**
Accounting for partnerships, consolidated statements, and other selected topics. Prerequisite: Business 302.
- 355. Business Communications (3I)**
Practical experience in written and oral expression on business subjects, with applications in commonly used business formats.
- 370. Business Law (3S)**
Fundamental principles of American law, contracts, negotiable instruments, agency, partnerships, corporations, and sales.
- 410. Marketing (3FW)**
Principles and practices of how goods, services and ideas are created and dispensed in modern society in order to satisfy individual and organizational objectives. Emphasis is placed on the micro-marketing perspective.
- 415. Human Resources Management (3FW)**
Personnel administration from a managerial perspective, including recruitment, training and development, compensation, and employee-management relations.
- 420. Management (3FWS)**
Methods and principles of achieving organizational objectives in business, including a survey of the environment of organizations and the administrative functions of planning, organizing, leading and controlling.
- 430. Investments (3W)**
The workings of asset markets, with special attention to the risks and returns of alternative holdings, financial markets and the evaluation of stocks and bonds.
- 440. Finance (3FS)**
Principles and methods of financing business activity, including acquisition and disposition of funds, capital budgeting, and capital structure. Prerequisites: Business 202, Mathematics 200.
- 470. Business Policy (3S)**
The relationship between theory, problem analysis and strategy implementation, with application to selected business cases. This course is intended to integrate all the areas of study within the Business major. Prerequisite: Senior standing in Business Administration or permission of instructor.

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Education

Bridgewater College provides a State-Approved Program for the preparation of elementary, middle, and secondary school teachers. Students who successfully complete this program and pass the National Teacher Examination receive certification in Virginia, and through reciprocal agreements among the State Directors of Teacher Certification.

may receive initial certification to teach in 18 states and the District of Columbia. In addition to Virginia, the states are Alabama, California, Delaware, Hawaii, Idaho, Indiana, Maine, Maryland, Massachusetts, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Utah, Vermont, West Virginia.

The elementary education program prepares the student for certification to teach in Nursery through Grade 4. The middle education program prepares one to teach in Grades 4–8 or in the Middle School. The Secondary program includes the following areas of specialization: Biology, Chemistry, Driver Education, English, English and Theatre Arts, French, German, Home Economics, Mathematics, Music, Health and Physical Education, Physics, Social Studies, and Spanish.

The student seeking certification in either Nursery through Grade 4 or Grades 4–8 must complete one of the following arts and science majors and must pass the comprehensive examination appropriate for that major: Art, Biology, Chemistry, Economics, English, French, General Science, German, History, History and Political Science, Mathematics, Music, Philosophy and Religion, Physics, Physical Science, Physics and Mathematics, Political Science, Psychology, Sociology, or Spanish. Among these majors, a major in English, Psychology, or Sociology is particularly recommended for a student seeking certification at the NK–4 level, and a major in Biology, English, General Science, History and Political Science, or Mathematics is particularly recommended for a student seeking certification at the Grades 4–8 level. With the exception of majors in French, German, and Spanish, a student who has completed all requirements of the teacher education program for certification at the NK–4 or 4–8 levels may receive either a Bachelor of Arts or a Bachelor of Science degree, regardless of the major field.

For certification at the Nursery through Grade 4 level, the student must complete Observation and Teacher Aiding and the following professional education courses: Education 300, 315, 330, 332, 365, 370, 375, 380, 461, and 462. Additional required courses are Geography 340 or 350, Health and Physical Education 200, and Speech 200.

For certification at the Grades 4–8 level, the student must complete the following professional education courses: Education 260, 300, 305, 315, 330, 332, 360, 365, 382, 384, and 471. Additional required courses are Geography 340 or 350, Health and Physical Education 200, and Speech 200.

For certification at the secondary level excluding Music, Home Economics, and Health and Physical Education majors, the student must complete the following professional education courses: Education 260, 300, 305, 310, 334, 366, 420, one course from Education 392, 394, 395, 396, 400, and Education 481. Additional required courses include Health and Physical Education 200 and Speech 200.

For certification to teach home economics at the secondary level, the student must complete Education 260, 300, 310, 366; Home Economics 340, 450, 471, and 481.

For certification to teach vocal music at the NK–12 levels, the student must complete Music 100, 211, 212, 213, 214, 422, 424, 436, 471, and 481. Education 260, 300, and 365 or 366.

For certification to teach instrumental music at the NK–12 levels, the student must complete Music 100, 211, 212, 213, 214, 327, 423, 436, 471, and 481. Education 260, 300, and 366.

For certification to teach health and physical education at the NK–12 levels, the student must complete Education 260, 300, 305, 310, 366, 450 or 481; Health and Physical Education 340, and four units from courses numbered 371–380.

Education (Cont.)

Formal application for admission to the State-Approved Program should be made to the Department of Education no later than February 1 of the sophomore year, and persons expecting to certify in Grades NK-4 or 4-8 should apply by the Spring Term of the freshman year. Upon admission to the Department of Education, the student may enroll in the beginning courses of the professional education sequence. The criteria used in evaluating an applicant are based upon the following:

1. A 2.00 quality point average on all work attempted prior to the time of initial application, as specified in the Teacher Education Handbook.
2. Recommendation of the department in which the student is a major.
3. Evidence of good character and personal relationships.
4. Evidence of good physical and emotional health.
5. Evidence of written and oral language ability.

A minimum grade of C in English 120, or its equivalent, is required of all students seeking acceptance into the teacher education program.

A minimum grade of C in Mathematics 105, or its equivalent, is required of all students seeking acceptance into the elementary and middle school teacher education programs.

Early in the student's junior year, the prospective teacher must apply to participate in student teaching. A second screening process is administered prior to the student teaching term wherein the criteria used are the same as before, except that the student must have attained a 2.20 quality point average as specified in the Teacher Education Handbook. As one of the prerequisites to student teaching, the student must engage in a planned program of observation and teacher aiding in a public school.

Each student expecting to prepare to teach follows the sequential steps listed below:

Freshman Year:

1. Counsel with faculty of the Department of Education. Persons planning to certify in Elementary or Middle Education should apply for admission to the Department of Education by the Spring Term.

Sophomore Year:

1. All prospective teachers should apply or have applied for admission to the teacher education program and be screened according to the criteria stated above.
2. Be involved in the observation and teacher aiding experience.

Junior Year:

1. Continue with education courses and with major subject field.
2. Apply for admission to student teaching and expect to be screened prior to the student teaching term according to the criteria listed above.
3. Plan additional work with young people in the summer.

Senior Year:

1. Participate in student teaching.
2. Take the National Teacher Examination. The State Department of Education requires both the Specialty Area and Core Battery Examinations.
3. Obtain an application for the Virginia Teaching Certificate from the Registrar's Office. (A nonreturnable application fee of \$35 is required by the State Department of Education.)

OBSERVATION AND TEACHER AIDING EXPERIENCE

Education (Cont.)

Observation and teacher aiding is an important part of the teacher preparation program. This program involves the student in observing the teacher and pupils and in working with individuals and small groups under the direction of the teacher. Arrangements for the observation and teacher aiding experience must be made with the Department of Education. Most students are able to pursue this program during the academic year while others do so in cooperating schools in the late spring when college is not in session.

A minimum of thirty hours of observation and teacher aiding experiences are prerequisite to Student Teaching. In addition, certain courses at the College include visitation to public schools as a regular part of instruction. The prospective teacher is encouraged to seek further experience working with children and youth in recreation centers, day care centers, and the like.

Admission to the Teacher Education Program is prerequisite to all courses in the department except 105, 290, 300, 310. In extraordinary circumstances exceptions to this policy may be granted by the Chairman of the Department of Education.

105. The College Student and His/Her Environment (3I)

Analytical and experimental analysis of the developmental stages occurring in the college student from ages seventeen or eighteen through the middle to late twenties. This course examines seven major vectors of student development and considers these vectors in relation to significant aspects of the college environment. Recommended for freshmen.

260. Practicum in Current Teaching Techniques (3I)

Gives the prospective teacher 90 clock hours of experience as an observer and/or aide in the elementary or middle or secondary school. This practicum is completed before the student teaching term. Reading of appropriate materials and a record of experiences are required.

290. Exploring Teaching (1S)

Provides the student a means for self assessment as a potential teacher. Learning activities include directed teaching activities, observations in public school classrooms, and selected readings on current issues facing the prospective teacher.

300. Educational Psychology (3FWS)

Application of psychological principles of development, learning, and evaluation to the educational process. Special attention is given to the use of behavioral technology in the classroom.

305. Growth, Development, Learning and Testing (3S)

Adolescence of middle/high school years. Physical and intellectual growth patterns, stages of social maturity, and psychological theory as applied to school learning are emphasized, and testing procedures and analysis of test data are addressed.

310. School and Society (3F)

Aspects of the foundations and philosophy of education with a review of significant events in the beginning, growth, and present status of schools in our country. Some aspects of educational practice in other countries are noted.

315. Mathematics for the Early and Middle Education Teacher (2S)

Content and methods designed to give the prospective teacher the basic mathematical understanding and skills needed for teaching grades K-8. Content topics include deductive reasoning, set theory, whole numbers, integers, operations and relations, numeration systems, rational numbers, elementary number theory. Mathematics laboratory experiences are included. Prerequisite: Mathematics 105, 110, or permission of the instructor and admission to the Teacher Education Program.

**Education
(Cont.)**

- 330. Developmental Reading (2W)**
Survey of the methods, techniques, and materials used in teaching reading.
- 332. Diagnostic Reading (2S)**
Evaluation of reading progress, diagnostic techniques, differentiation of instruction to fit needs, and corrective methods for use in the classroom. Prerequisite: Education 330.
- 334. Reading in the Content Areas (2W)**
Reading theory and practices. Developmental and diagnostic practices are correlated with study of ways for content teachers to improve reading skills as the content is studied.
- 360. Science in the Middle School (1)**
Biological and physical sciences as taught in the middle school. One lecture per week.
- 365. Exceptional Child (2S)**
Psychological and behavioral characteristics of exceptional children. Attention is given to learning styles and the problems and potential of educating in elementary/middle school settings. Problem solving and workshop approaches are emphasized.
- 366. The Exceptional Student (2F)**
Psychological and behavioral characteristics of the exceptional student. Emphasis is placed on learning styles and the potential for educating handicapped and gifted students in secondary school. Problem solving and workshop approaches are employed.
- 370. Classroom Organization and Management (3I)**
Theories and techniques for appropriate classroom organization and management. Different theories of behavior management are reviewed as well as the research on effective teaching.
- 375. Educational Technology (1S)**
Technological equipment commonly found in today's elementary schools. Exposure to computers; audiovisual equipment such as videotape cameras and recorders, instructional television, film projectors, overhead projectors; and laminating, copying, and duplication are presented.
- 380. Curriculum and Instruction in NK-4 (3W)**
Theory and practice related to the curriculum and instructional techniques appropriate for the NK-4 grades. Attention is given to the differentiation of instruction in terms of pupil learning ability.
- 382. Language Arts in the Middle School (2W)**
Related factors which influence the total language development of the child. Specific attention is given to the development of communication skills—writing, reading, speaking, and listening—at the various developmental levels, and instructional activities for the middle school age are presented.
- 384. Social Sciences in the Middle School (1W)**
Content, methods of teaching, appropriate materials and activities, and ways of organizing groups for effective learning experiences in the modern day social studies program.
- 392. Methods of Teaching and Classroom Management in English (1S)**
Instructional practice, management, and evaluation. Specific to the subject field, this course is offered concurrently with a field experience in the classroom of a high school teacher in that field.

- 394. Methods of Teaching and Classroom Management in Mathematics (1S)**
Instructional practice, management, and evaluation. Specific to the subject field, this course is offered concurrently with a field experience in the classroom of a high school teacher in that field.
- 395. Methods of Teaching and Classroom Management in Science (1S)**
Instructional practice, management, and evaluation. Specific to the subject field, this course is offered concurrently with a field experience in the classroom of a high school teacher in that field.
- 396. Methods of Teaching and Classroom Management in Social Studies (1S)**
Instructional practice, management, and evaluation. Specific to the subject field, this course is offered concurrently with a field experience in the classroom of a high school teacher in that field.
- 400. Methods of Teaching and Classroom Management in Foreign Language (3S)**
Instructional practice, management, and evaluation. Specific to the subject field, this course is offered concurrently with a field experience in the classroom of a high school teacher in that field.
- 420. Principles of Secondary Education (3I)**
Principles, practices, trends, and organizational patterns of today's secondary schools. Special attention is given to educational media and its use.

LABORATORY EXPERIENCES IN TEACHING

Student teaching is offered for prospective elementary, middle, and secondary teachers during their senior years. Students are required to teach full days, and, while most student teachers may be placed in nearby schools, individual students may need to live off-campus in the community in which student teaching is available. In either case, the student is responsible for travel and personal expenses. Thirty hours of observation and teacher aiding is prerequisite to student teaching. A weekly seminar is included as a part of the student teaching requirement.

- 450. Supervised Teaching in Elementary Physical Education (10FS)**
Instructional planning, observation, and teaching under supervision in elementary physical education. In addition to prerequisites and conditions stated above, Health and Physical Education 426 is prerequisite to this course and the student must be enrolled in a program leading to certification.
- 461. Supervised Teaching in Nursery/Kindergarten (7F)**
Instructional planning, observation, and teaching under supervision. See prerequisites and conditions stated above.
- 462. Supervised Teaching in Grades 1-4 (7F)**
Instructional planning, observation, and teaching under supervision. See prerequisites and conditions stated above.
- 471. Supervised Teaching in Grades 4-8 (10FS)**
Instructional planning, observation, and teaching under supervision. See prerequisites and conditions stated above.
- 481. Supervised High School Teaching (10FS)**
Instructional planning, observation, and teaching under supervision. See prerequisites and conditions stated above.

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English

A major in English consists of 36 units excluding 110, 120, 201, 202, and 203 and including 301, 302, 303, 330, 401, 402, and 450. Courses numbered 110, 120, 201, 202, and 203 may not be included in an English major.

A minor in English consists of 21 units excluding 110, 120, 201, and 203 and including two courses from 301, 302, 303; 330; and one course from 401 and 402.

A minor in Theatre and Speech consists of 18 units including English 330, nine units in Theatre, and six units in Speech. Courses which are listed on a student's plan of the major in English are excluded, with the exception of Speech 200.

A minor in Communications consists of a minimum of 18 units and must include English 255, 260, and Speech 200. Other courses which may be included are English 312, 335, 480, and 490; Speech 210; Business 355; and Art 213. Courses listed on a student's plan for the major in English are excluded. Also required is active participation (certification by the faculty sponsor) for the equivalent of one academic year in one or more of the following: the college newspaper (*The Talon*), the yearbook (*Ripples*), radio station (WGMB), or intercollegiate debate team.

English 120 is a prerequisite to all courses in the department numbered 200 or above.

110. English Composition (3FWS)

Fundamentals of composition and oral communication. This course is required for all students who score below a designated point on the English Placement Test.

120. Composition and Literary Forms (3FWS)

Development of the student's ability to write clearly and to speak effectively, with special emphasis upon the preparation of a research paper. The course includes study of the literary forms of the short story, drama, and poetry. Prerequisite: English 110 or satisfactory performance on the English Placement Test.

201. Western Thought in Literature: The Greek Foundation (3WS)

Examination of the thought and literature of the early Greeks that is foundational to western thought and culture, including Greek mythology, Greek drama, and selections from the works of Plato.

202. Western Thought in Literature: The Renaissance (3FWS)

Readings in some of the basic works that express the world views of Renaissance humanism and reveal its influence on later literature.

203. Western Thought in Literature: The Modern World (3FWS)

Readings in works that express the major concerns and views of man in the nineteenth and twentieth centuries, with emphasis on the latter.

222. The Lure of the American West (3I)

The attraction of the American frontier or West was powerful in drawing thousands of Europeans to this country and still today the west has strong imaginative appeal. The course examines this appeal as expressed in such works of literature as *Giants in the Earth* and *Shane*.

223. The Popular Novel (3I)

Exploration of the popular novel from 1930 to the present, both British and American. A variety of genres, with a variety of themes, is examined to discover why one form or genre is more "readable" than another. Current publishing trends are studied to predict future popularity of existing genres and the emergence of new genres.

250. Literature for Children (3S)

A study of standard, classic, and current books with aids and criteria for selection, and with attention to problems of the reluctant and non-reader.

- 255. Newspaper Writing (3S)**
Instruction in researching, investigating, and writing a newspaper story in a variety of formats and styles. Alternate years; offered 1990–91.
- 260. Newspaper Editing (3S)**
Instruction in the fundamentals of newspaper editing, both in the editing of actual copy and in the larger context of editorial decision making. Students will also learn principles and styles of newspaper format, layout, and design as they relate to editorial policy and intent. Alternate years; offered 1991–92.
- 300. Advanced Grammar (3S)**
A brief consideration of the history of the English language, and study of structural linguistics and generative-transformation grammar. Alternate years; offered 1991–92.
- 301. English Literature to 1660 (3F)**
The development of English literature from its beginnings to the Restoration. Alternate years; offered 1990–91.
- 302. English Literature 1660–1832 (3W)**
The development of English literature from the Restoration to the Victorian period. Alternate years; offered 1990–91.
- 303. English Literature 1832–the present (3S)**
The development of English literature since 1832. Alternate years; offered 1990–91.
- 310. Advanced Composition (3W)**
Includes the writing of at least one theme a week and examination of methods of teaching writing. This course is required of all prospective teachers of English. Alternate years; offered 1990–91.
- 311. Creative Writing (3W)**
Provides the interested student with an opportunity to gain deeper insight into literary techniques and values by producing original essays, short and longer fictions, dramas, poems, song forms, and editorial sequences which express his emotions and his ideas. Writing workshops include individual conferences and group conferences for intensive criticism. Prerequisite: Consent of instructor. Alternate years; offered 1990–91.
- 316. Good Music and Good Literature From World War I Through World War II (3I)**
Music and literature as an expression and as a reflection of American culture from World War I through the 1920s, the great depression and World War II. Readings include both prose and poetry of representative authors: Upton Sinclair, Sinclair Lewis, Ernest Hemingway, John Steinbeck, Jon Dos Passos, Carl Sandburg, Robert Frost, and E. E. Cummings. Musically, the performers, composers, bands and orchestras include Count Basie, the Dorsey brothers, Duke Ellington, Benny Goodman, Woody Herman, Harry James, Stan Kenton, Glenn Miller, Artie Shaw, and Paul Whiteman. Broadway musicals and the effects of jazz on classical music are reviewed.
- 330. Shakespeare (3F)**
A critical examination of Shakespeare's development as a dramatist and of his basic themes. Approximately twelve plays are considered. Alternate years; offered 1990–91.
- 333. Modern Irish Literature (3I)**
A survey of twentieth-century Irish literature, including works by William B. Yeats,

**English
(Cont.)**

James Joyce, Samuel Beckett, Elizabeth Bowen, Edna O'Brien, John Mullington Synge, Sean O'Casey, Seamus Heaney, and Frank O'Connor. In addressing the literature, also considered is how Ireland's history, geography, and religious and cultural heritage have shaped the Irish spirit and evoked in its artists a passionate love-hate toward their native land.

340. Chaucer (3F)

A critical examination of *Troilus and Cressida*, *Canterbury Tales*, and several minor works. Alternate years; offered 1991-92.

381. The Romantic Movement (3W)

The critical theories and poetry of Wordsworth, Coleridge, Byron, Shelley, and Keats. Alternate years; offered 1990-91.

385. Modern Literature (3W)

A study of British and American literature since World War I. Alternate years; offered 1991-92.

401. American Literature to 1865 (3F)

The development of American literature from colonial times to the Age of Realism. Alternate years; offered 1991-92.

402. American Literature after 1865 (3W)

The development of American literature from the Age of Realism to Modern times. Alternate years; offered 1991-92.

420. The Novel (3S)

Seven or eight novels illustrating the development of the English novel from its beginning through the nineteenth century. Alternate years; offered 1990-91.

450. Senior Seminar (3WS)

An in-depth scholarly examination of a literary topic or figure to be selected by the instructor.

RELATED COURSES: THEATRE AND SPEECH

200. Public Speaking (3FWS)

Essentials of effective speaking and the principles of delivery and of speech composition.

210. Group Discussion: Theory and Technique (3W)

Essentials of effective use of the small group discussion as a method for reflective thinking and problem solving. Practice in small group deliberation is provided. Alternate years; offered 1991-92.

300. Highlights in Theatre History (3S)

Selected periods in the development of the theatre and of its relation to its culture; emphasis is on theatre practice, and theatrical personalities including actors, playwrights, and designers. Alternate years; offered 1990-91.

305. Oral Interpretation of Literature (3I)

Theory and practice in oral interpretation of a variety of forms of literature. During the first week, emphasis is on prose; during the second week, emphasis is on poetry; during the third week, final programs are organized, rehearsed, and performed for the public.

310. Elements of Play Production (3I)

Introduction to the theories and techniques of the modern theatre and of theatre

production in particular. Fundamentals of directing, lighting, make-up, and costuming. Alternate years; offered 1990-91.

320. Modern Drama (3W)

The theatrical literature of selected playwrights from 1850 to the present. Alternate years; offered 1991-92.

330. Acting (3F)

Development of acting skills through both classroom and laboratory experiences in acting. The course includes a brief examination of the historical development of various acting theories and techniques. Alternate years; offered 1990-91.

345. Teaching and Directing Theatre (3I)

Designed for the teacher of theatre in the high school, the course examines methods whereby theatre can be taught in the classroom and used as a teaching medium for other subjects. Over-all direction of an extra-curricular theatre group is also examined including organization of such a group, activities, play selection, and other considerations not including actual play production techniques. Prerequisite: Consent of instructor.

370. English Drama to 1800 (3S)

Origins of English theatre and representative plays from the Medieval and Tudor periods through Sheridan, exclusive of Shakespeare. Alternate years; offered 1991-92.

Itinerary, and the lively non-professional theatre in the London suburbs are also explored. Daytime backstage tours and visits to the new Theatre Museum and other backstage theatrical, historical, and cultural interests complement the three-week experience, as well as a side-trip to Stratford-upon-Avon.

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A major in French, German, or Spanish consists of a minimum of 37 units in courses numbered 300 or above: 19 units at Bridgewater College including 310, 320, 325 or 335, 410, and 460; and participation in the junior year in Brethren Colleges Abroad (see page 28 for a description of the Brethren Colleges Abroad Program). The student may apply to the Council on Education for an exception to the BCA requirements. Courses numbered 201 and 202 are prerequisite to all courses of a higher number unless the department determines that a student is otherwise qualified.

A minor in French, German, or Spanish consists of 310, 320, 410, and three additional courses numbered above 202.

FRENCH

101, 102. Elementary French (3W, 3S)

Introduction to the structure and practice of modern French. Prerequisite to French 102: French 101 or placement.

110. Live Lab: Beginning Conversation (1S)

Oral practice in French at the beginning level. Corequisite: French 102.

111. Live Lab: Intermediate Conversation (1F)

Oral practice in French at the intermediate level. Corequisite: French 201.

112. Live Lab: Intermediate Conversation II (1W)

Oral practice in French at the intermediate level. Corequisite: French 202.

**Foreign
Languages
(Cont.)**

- 201, 202. Intermediate French (3F, 3W)**
Review of basic principles, and practice in speaking, hearing, and writing simple French. Reading of modern cultural and literary texts is included. Prerequisite to French 201: French 102 or placement. Prerequisite to French 202: French 201 or placement.
- 242. French Colonial Empire (3I)**
The French Colonial Empire: how it came into being, the social and historical development of the separate colonies, the period of liberation, and its modern day form. The course is taught in English.
- 310. Conversation and Diction (3S)**
Intensive practice, designed to promote fluency in speaking correct and idiomatic French. Alternate years; offered 1991–92.
- 315. Business French (3S)**
A study of commercial and technical vocabulary and trade customs in conjunction with practice in the art of commercial communication, including interviews, telephone conversations, letter writing, marketing projects, and simultaneous interpretation. Given in French. Alternate years; offered 1990–91.
- 320. Advanced Grammar (3F)**
Study and analysis of advanced grammatical structures; translation exercises and some limited composition work. Offered 1991–92.
- 321. Composition and Creative Writing (3W)**
Analysis of structure and style; exercises in composition; special attention to idiomatic use of language; practical experience in writing poetry and prose. Prerequisite: French 320. Offered 1991–92.
- 325. Survey of French Literature I (3W)**
Representative French authors from the Middle Ages through the 18th century. Social and historical background is included. Alternate years; offered 1990–91.
- 330. Literature and Life of the Classical Period (3W)**
Art and ideas of the significant classical writers and the social and historical background. Given in French. Alternate years; offered 1990–91.
- 335. Survey of French Literature II (3W)**
Representative French authors from the 19th and 20th centuries. Social and historical background is included. Alternate years; offered 1991–92.
- 340. Literature and Life of the Middle Ages and the Renaissance (3W)**
La Chanson de Roland, Le Roman de la rose, Villon, Rabelais, Montaigne, Du Bellay, Ronsard and others are studied in modern French. Social and historical background is included. Given in French. Offered 1994–95.
- 350. The Age of Enlightenment (3F)**
The literary works of Voltaire, Rousseau, and other pre-Revolutionary writers. Social and historical background of the French Revolution. Given in French. Offered 1991–92.
- 360. Special Topics (3FWIS)**
Devoted to a subject chosen from the corpus of Francophone language, civilization, and literature. Possible topics include French African literature, phonetics, drama, French Canadian literature, civilization and culture of the French Caribbean. This course may be taken more than once, provided different topics are covered.

410. French Culture and Civilization (3F)

Summary of the historical development of France; political, social, and educational institutions; and movements in art and music. Emphasis is on the life, customs, and character of the people today. Given in French. Alternate years; offered 1991-92.

460. Senior Seminar (1F)

Discussion and oral presentation of a research paper by students on topics in Franco-phone language, culture, and literature.

GERMAN

101, 102. Elementary German (3W, 3S)

Introduction to the structure and practice of modern German. Prerequisite to German 102: German 101 or placement.

110. Live Lab: Beginning Conversation (1S)

Oral practice in German at the beginning level. Corequisite: German 102.

111. Live Lab: Intermediate Conversation I (1F)

Oral practice in German at the intermediate level. Corequisite: German 201.

112. Live Lab: Intermediate Conversation II (1W)

Oral practice in German at the intermediate level. Corequisite: German 202.

201, 202. Intermediate German (3F, 3W)

Review of basic principles, and practice in speaking, hearing, and writing simple German. Reading of modern cultural and literary texts is included. Prerequisite to German 201: German 102 or placement. Prerequisite to German 202: German 201 or placement.

240. Modern German Culture (3I)

The culture and civilization of East and West Germany including such topics as historical development, art, music, literature, education, and political systems. This course is taught in English.

310. Conversation and Diction (3S)

Intensive practice, designed to promote fluency in speaking correct and idiomatic German. Alternate years; offered 1991-92.

315. Business German (3S)

A study of commercial and technical vocabulary and trade customs in conjunction with practice in the art of commercial communication, including interviews, telephone conversations, letter writing, marketing projects, and simultaneous interpretation. Given in German. Offered on demand.

320. Advanced Grammar (3F)

Study and analysis of advanced grammatical structures; translation exercises and some limited composition work. Offered on demand.

321. Composition and Creative Writing (3W)

Analysis of structure and style; exercises in composition; special attention to idiomatic use of language; practical experience in writing poetry and prose. Prerequisite: German 320. Offered on demand.

325. Survey of German Literature I (3W)

Representative German authors from the Middle Ages through the 18th century. Social and historical background is included. Alternate years; offered 1991-92.

**Foreign
Languages
(Cont.)**

- 335. Survey of German Literature II (3W)**
Representative German authors from the 19th and 20th centuries. Social and historical background is included. Alternate years; offered 1990–91.
- 360. Special Topics (3FWIS)**
Devoted to a subject chosen from the corpus of Germanic language, civilization, and literature. Possible topics include dialectology, scientific German, modern German literature, German American studies, music in German culture. A student is allowed to take the course more than once, provided different topics are covered.
- 410. German Culture and Civilization (3W)**
Summary of historical development of Germany; political, social, and educational institutions; and movements in art and music. Emphasized are the life, customs, and character of the people of today. Given in German. Alternate years; offered 1990–91.
- 420. German Literature of the Nineteenth Century (3W)**
Representative writers of the nineteenth century. Social and historical background. Given in German. Alternate years; offered 1990–91.
- 460. Senior Seminar (1F)**
Discussion and oral presentation of a research paper by students on topics in Germanic language, culture, and literature. Offered on demand.

SPANISH

- 101, 102. Elementary Spanish (3W, 3S)**
Introduction to the structure and practice of modern Spanish. Prerequisite to Spanish 102: Spanish 101 or placement.
- 110. Live Lab: Beginning Conversation (1S)**
Oral practice in Spanish at the beginning level. Corequisite: Spanish 102.
- 111. Live Lab: Intermediate Conversation I (1F)**
Oral practice in Spanish at the intermediate level. Corequisite: Spanish 201.
- 112. Live Lab: Intermediate Conversation II (1W)**
Oral practice in Spanish at the intermediate level. Corequisite: Spanish 202.
- 201, 202. Intermediate Spanish (3F, 3W)**
Review of basic principles, and practice in speaking, hearing, and writing simple Spanish. Reading of modern cultural and literary texts is included. Prerequisite to Spanish 201: Spanish 102 or placement. Prerequisite to Spanish 202: Spanish 201 or placement.
- 245. Mexican Culture (3I)**
History, culture, and geography of theories are studied in preparation for a two-week study tour of Mexico City with excursions to outlying places of interests. Experiences include the silver mining tour of Taxco, Chapultepec Castle, Archaeological Museum, bullfights, U.S. Embassy, Folkloric Ballet of Mexico, a movie in Spanish, church service in Spanish, and the pyramids of Teotihuacan.
- 310. Conversation and Diction (3S)**
Intensive practice, designed to promote fluency in speaking correct and idiomatic Spanish. Alternate years; offered 1991–92.
- 315. Business Spanish (3S)**
A study of commercial and technical vocabulary and trade customs in conjunction with practice in the art of commercial communication, including interviews, telephone

conversations, letter writing, marketing projects, and simultaneous interpretation. Given in Spanish. Alternate years; offered 1990–91.

320. Advanced Grammar (3F)

Study and analysis of advanced grammatical structures; translation exercises and some limited composition work. Alternate years; offered 1991–92.

321. Composition and Creative Writing (3W)

Analysis of structure and style; exercises in composition; special attention to idiomatic use of language; practical experience in writing poetry and prose. Prerequisite: Spanish 320. Alternate years; offered 1991–92.

325. Survey of Spanish Peninsular Literature (3W)

Representative Peninsular authors from the Middle Ages through the 20th century. Social and historical background is included. Alternate years; offered 1990–91.

335. Survey of Latin-American Literature (3W)

Representative Latin-American authors from the discovery of the Americas through the 20th Century. Social and historical background is included. Alternate years; offered 1991–92.

360. Special Topics (3FWIS)

Devoted to a subject chosen from the corpus of Hispanic language, civilization, and literature. Possible topics include Golden Age drama, Alfonso Sastre, phonetics, music in Latin America. A student is allowed to take the course more than once, provided different topics are covered.

410. Spanish Culture and Civilization (3F)

The historical development of Spain and Spanish America; political, social, and educational institutions; and movements in art and music. Emphasis is on the life, customs, and character of the people today. Given in Spanish; offered 1991–92.

420. Medieval and Golden Age Literature and Life (3F)

Spanish masterpieces dating from the epic, *El Cid*, through the works of Cervantes, Lope de Vega, Calderon, and others. Alternate years; offered 1990–91.

431. Latin-American Short Stories (3W)

The modern short story in Latin America. Social and historical background is included. Alternate years; offered 1991–92.

440. Literature and Life of the Nineteenth Century (3W)

The principal peninsular writers of Romanticism and Realism and the society in which they lived. Given in Spanish. Offered 1994–95.

460. Senior Seminar (1F)

Discussion and oral presentation of a research paper by students on topics in Hispanic language, culture, and literature.

RELATED COURSES: LINGUISTICS

300. General Linguistics (3S)

Introduction to linguistic science. Descriptive linguistics: phonemics, morphemics, syntax; comparative-historical linguistics. Prerequisite: Foreign language at the intermediate level or permission of the instructor. Offered on demand.

400. Teaching of Foreign Languages (3F)

(See Education 400.)

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Health and Physical Education

A major in Health and Physical Education consists of not less than 42 units, including three activity courses of which one must be swimming, and courses numbered 201, 300, 310, 320, 335, 350, 360, 364, 365, 368, 385, 426, and 440; and Biology 305. In addition to the above requirements, students seeking teaching certification in Health and Physical Education must complete Education 260, 300, 305, 310, 366, and either 481 for secondary certification or 450 for elementary certification; a minimum of 3 and a maximum of 6 units from Health and Physical Education 371–380; and Health and Physical Education 340.

A major in Health Science consists of 40 units including courses numbered 201, 300, 320, 325, 335, 350, 360, 427 and 440; Biology 305, and 314; Chemistry 141; and Home Economics 240.

A minor in coaching consists of Health and Physical Education 310, 335, 360, 368, 440, three courses from 371–380, and 480. This minor may not be taken with a major in Health and Physical Education.

A minor in athletic training consists of Health and Physical Education 300, 320, 335, 360, 381, and 386, and Biology 305 and 314. In addition, a student must complete 1,500 clock hours of clinical experience under the supervision of a certified athletic trainer with no more than 750 hours completed in one academic year. (Upon completion of the bachelor's degree program and a minor in athletic training, a student who has the recommendation of the student's athletic trainer supervisor may take the National Athletic Trainers Association Certification Examination to become a certified athletic trainer.)

Skill development in physical activity is a part of the general education program. Each activity course meets three hours per week for a term and carries one unit of credit. An activity may be repeated for credit only at a higher level of proficiency. No more than four units of credit in activity courses may be applied toward graduation. The activities offered are listed below.

110FS.	Archery	180W.	Fitness and Weight Control
115W.	Badminton-racquetball	190FS.	Cycling
120W.	Bowling	210FS.	Intermediate Archery
125FW.	Modern Dancing	215W.	Intermediate Badminton-racquetball
126FWS.	Aerobic Dancing	220W.	Intermediate Bowling
130F.	Field Hockey	225W.	Intermediate Dance
135FS.	Golf	235FS.	Intermediate Golf
140W.	Gymnastics	240W.	Intermediate Gymnastics
145W.	Handball	245W.	Intermediate Handball
150S.	Lacrosse	252W.	Intermediate Snow Skiing
152W.	Snow Skiing	262WS.	Intermediate Swimming
155F.	Soccer	265FS.	Intermediate Tennis
160S.	Softball	362FS.	Lifesaving
162FWS.	Swimming		
165FS.	Tennis		
170W.	Volleyball		
175S.	Conditioning and Weight Training		
177FWS.	Fitness-Jogging		

201. Health Concepts and Strategies (2W)

Research, reports, and guided discussion in areas of personal health, school health, and community health that are especially pertinent in today's society.

205. Introduction to the Allied Health Professions (3I)

Several allied health professions including physical therapy, occupational therapy, exercise physiology, respiratory therapy, cardiac fitness, and nutrition. The class visits various allied health sites in the Shenandoah Valley. After students familiarize themselves with several allied health professions, each student chooses one area of particular interest to research and present through a term paper and oral presentation.

300. Personal and Community Health (3F)

Contemporary health problems: mental health, exercise and weight control, stimulants and depressants, communicable diseases, marriage and family relationships.

310. History and Principles of Health and Physical Education (3S)

Relationships of fields of health, physical education, and recreation to each other and to general education. Study of historical and philosophical backgrounds. Analysis of objectives of physical education based on the principles of physiology, psychology, and sociology.

320. Kinesiology (3W)

Human motion including the mechanical, anatomical, and physiological principles that govern the moving body. A review of selected body structures and an analysis of simple movements is included. Prerequisite: Biology 305.

325. Principles of Health and Physical Fitness Assessment (3W)

Practical experience in evaluation of physical fitness and its application to the implementation of safe and effective exercise training programs. Alternate years; offered 1990-91.

335. Physiology of Exercise (3I)

Basic physiological concepts of the nervous, muscular, and energy systems. Included is the effect of exercise on such functions as circulation, respiration, and temperature regulation. Prerequisite: Biology 305.

340. Health and Physical Education Methods (3W)

Administration of school health and physical education programs, including health instruction, environmental services, and curriculum content. Methods and materials used in teaching health and physical education are covered. Experiences in unit structure and application of teaching techniques are provided. Prerequisite: Physical Education 300 or consent of instructor.

350. Tests and Measurements (3S)

Methods used in finding the abilities and ratings of students in health and physical education. Tests and measurements of physical fitness, social efficiency, and motor and physical skill.

360. Organization and Administration of Health and Physical Education (3F)

Desirable standards and policies in the organization, supervision, and administration of health education and physical education on all school levels and in all phases of the program.

364. Team Sports (2F)

Designed to increase the knowledge and skill of the student in numerous team sports. Readings from noted authors, construction of teaching units, and exposure to several activities increase the student's knowledge and skills in the field.

365. Individual and Dual Sports (2S)

Designed to increase the knowledge and skill of the student in numerous individual and dual sports. Readings from noted authors, construction of teaching units, and exposure to several activities are included.

**Health and
Physical
Education
(Cont.)**

368. Psychological Principles of Physical Education and Sports (3W)

How basic psychological learning principles apply to the acquisition of motor skills. Motivation, discipline, aggressiveness, various approaches to coaching, the problem athlete and other psychological and sociological implications emanating from athletic competition are discussed.

371–380. Teaching and Coaching Methods

Techniques of teaching and coaching popular sports from basic fundamentals to detailed strategies. Organizational methods and administrative concerns particular to the specific sport are included.

371. Coaching Football (2F)

372. Coaching Track and Field (1S)

373. Coaching Basketball (2W)

374. Coaching Baseball and Softball (1W)

375. Coaching Tennis (1F)

376. Coaching Field Hockey (1F)

377. Coaching Volleyball (1F)

378. Coaching Gymnastics (2W)

379. Coaching Soccer (1F)

380. Coaching Wrestling (1W)

381. Medical and Anatomical Management of Athletic Injuries (3F)

Principles of injury recognition and initial management of sports injuries for coaches, physical education teachers, and other athletic health care personnel. Prerequisite: Biology 305.

385. Adaptive Physical Education and Recreation (3I)

Exposure to the recreational needs and capabilities of the physically and mentally handicapped. Orientation to wheelchair sports and practical experience in their leadership comprise a major part of the course. Opportunities for working in art, crafts, drama, and music are available for persons qualified in these areas. Prerequisite: Consent of instructor.

386. Diagnostic Techniques of Athletic Training (3W)

Advanced study of the etiology, pathology, and clinical signs of common athletic injuries. Diagnostic and rehabilitation procedures for treating athletic injuries by the athletic trainer are emphasized. Prerequisite: Physical Education 381.

410. Issues in Athletic Training and Sports Medicine (2S)

Current issues and trends in athletic training with emphasis on the professional preparation of athletic trainers and the role of the certified athletic trainer in athletic health care delivery systems.

420. Leadership in Recreation (3I)

Recreation in the home, school, church, youth and other community organizations. Practical work in social and recreational activities. The course is designed for those who wish to specialize in recreational leadership and arts and crafts.

425. Health and Physical Education for the Early and Middle Education Teacher (3I)

Experiences and techniques of teaching health, physical education, and recreational activities in elementary school. Emphasis is placed on movement education, and practical experiences are gained in actual teaching situations. Prerequisite: Education 300 and Education 320 or Physical Education 340.

426. Movement Experiences for Elementary Children (3W)

Basic concepts and techniques in movement education, including elementary gymnastics and rhythmic activities. Opportunities for practical application of movement education teaching techniques provided. Prerequisite: Education 300 or consent of instructor.

427. Health Promotion and Wellness (3S)

A multi-faceted approach to understanding the role of physical activity for the adult. The student identifies the risk factors associated with coronary heart disease and the role of physical activity in risk factor modification. Alternate years; offered 1990-91.

440. First Aid and Prevention of Athletic Injuries (3S)

Fundamentals of administering first aid in all its aspects with attention to the prevention and treatment of athletic injuries. Emphasis is placed on general safety procedures surrounding activities of school, college, and community environments.

441. Safety Education (3I)

Emphasis is placed upon the scope and methods of safety education including pedestrian, bicycle, traffic, vocational, home, farm, and physical education safety.

445. Driver Education (3FS)

Designed for the student who plans to teach driver education. Included are critical analysis of traffic accidents, relation of attitude factors to safety, essentials of automobile operation, and traffic laws and regulations. Experiences include the use of psychophysical and psychological tests in the development of driving skills and practice in driving instruction. Prerequisite: Admission to the secondary education program or consent of the department.

* * * * *

A major in History consists of 33 units and is distributed as follows: nine units in American History-History 370, 380, and 355 or 360; nine units in European History-History 302 and two courses from History 300, 301, and 330; six units in Non-Western History-History 400, 410, 420 or 430, and 440; History 470; and six units in electives from History or Political Science courses numbered 300 or above. History 101, 102, 103, 201, and 202 are co-requisites to a major in History and should be completed by the end of the sophomore year.

A major in History and Political Science consists of 36 units and is distributed as follows: six units in European History which include History 300 or 301, and 302 or 330; three units in American History from History 370 or 380; and three units in Non-Western History from History 400, 410, and 440; twelve units in Political Science which include six units in American politics from Political Science 210 and 310; three units from international politics from Political Science 410 or 430; Political Science 200; six units in electives from History 355, 360, 420, 430, and 470; six units in electives from Political Science 326, 327, 330, 410, and 470. Either History 470 or Political Science 470 must be included in the elective courses. Students seeking teacher certification in History and Social Studies must substitute Geography 340 and 350 in place of the History electives and six units in Economics in place of the Political Science electives. History 101 or 102, 103, 201, and 202 are co-requisites to a major in History and Political Science and should be completed by the end of the sophomore year.

**History
and
Political
Science
(Cont.)**

A major in Political Science consists of 33 units and is distributed as follows: Political Science 350, 400, and 470; nine units in American politics from Political Science 310, and two courses from Political Science 326, 327, 330, 355, and 360; nine units in international politics from Political Science 410, 420, 430, and 460; and six units in electives from History or Political Science courses numbered 300 or above. History 101, 102, and 103 and Political Science 200 and 210 are co-requisites to a major in Political Science and should be completed by the end of the sophomore year.

A major in International Studies consists of 33 units distributed as follows: twelve units in History from History 302, 355, 400, 410, 420 or 430, and 440; nine units in Political Science from Political Science 410, 420, 430, 436, and 460; Religion 340 or 350; Economics 430 or 440; Sociology 300 or 325; and Political Science 470. History 101, 102, 103, 201, and 202 are co-requisites to a major in International Studies and should be completed by the end of the sophomore year. A language minor and participation in Brethren Colleges Abroad are strongly recommended.

A minor in History consists of a minimum of 18 units and is distributed as follows: six units in American History from History 355, 360, 365, 370, and 380; six units in European History from History 300, 301, 302, 306, 330, and 340; and six units of Non-Western History from History 308, 400, 410, 420 or 430, 440, and 460. History 101, 102, or 103; 201 and 202 are prerequisite to a minor in History. This minor may not be taken in conjunction with either a major in History and Political Science or a major in International Studies.

A minor in Political Science consists of a minimum of 18 units distributed as follows: Political Science 350 and 400; six units in American politics from Political Science 310, 326, 327, 330, 355, 360, and 435; and six units in international politics from Political Science 410, 420, 430, 436, and 460. History 101, 102, or 103; and Political Science 200 and 210 are prerequisites to a minor in Political Science. This minor may not be taken in conjunction with either a major in History and Political Science or a major in International Studies.

HISTORY

101. Western Civilization to 1500 (3F)

Contributions to our present-day civilization of the ancient Near East, the Greeks and the Romans, the early and medieval Christian Church, and the Renaissance.

102. Western Civilization from 1500 to 1815 (3FW)

Contributions to our present-day civilization of the Protestant Reformation, the Divine Right of Kings, the scientific revolution, and the political revolutions in England, America, and France.

103. Western Civilization since 1815 (3S)

Contributions to our present-day civilization of rapid political, military, economic, scientific, intellectual, and social changes in Europe and the United States.

201. United States Civilization before 1877 (3F)

Development of a new civilization which began with the English settlement in Virginia is emphasized. The ties with England were severed during the American Revolution, which was followed by the rise of a new nation in the United States. At the same time, sectional problems evolved which led the Civil War and Reconstruction. In all of these events Virginians were playing a significant role as the United States developed a democratic government politically and a free enterprise system economically.

202. United States Civilization after 1877 (3W)

In the years following 1877, the United States continued to change industrially and agriculturally as the result of technological developments. In addition, the course examines political, military, economic, social, and intellectual changes of the period.

275. The Origins and Development of American Constitutionalism (3I)

American Constitutionalism from the perspective of its origin and development in European history from feudal times to the end of the 18th century. Emphasis focuses on the critical concepts, ideas, and political principles that in 1787 were incorporated in this new and very revolutionary document, the American Constitution.

300. Early Modern Europe (3F)

Evolution of early modern Europe between 1648 and 1789 as well as the ideas, forces, and events which shaped the period. Particular attention is given to the rise of mercantilism, the agricultural revolution, the rise of the middle class, the scientific revolution, the development of the international state system, the Enlightenment, and the industrial revolution. Alternate years; offered 1991-92.

301. Modern Europe prior to 1870 (3F)

From the French Revolution to 1870 with emphasis upon the consideration of the forces of nationalism and liberalism. Prerequisites: Two of the following: History 101, 102, 103; or permission of the department. Alternate years; offered 1990-91.

302. Europe Since 1870 (3W)

Events following the Franco-Prussian War and leading up to the First World War. Cultural and economic factors as well as international, domestic, political, and military history are considered. Prerequisites: Two of the following: History 101, 102, 103; or permission of the department. Alternate years; offered 1990-91.

308. The Vietnam Conflict (3I)

A study of the Vietnamese conflict from the days of French rule to the present. Emphasis will be on the development of Vietnamese nationalist and revolutionary movements and the impact and consequences this had in Vietnam and among other powers involved, particularly France and the United States.

330. England and the British Empire (3W)

Social, constitutional, and diplomatic developments in England, with special emphasis upon the effects of the industrial revolution. Alternate years; offered 1990-91.

355. Diplomatic History of the U.S. (3F)

American foreign policy with reference to political, social, and economic development shaping that policy. Prerequisite: History 201, 202. Alternate years; offered 1991-92.

360. American Constitutional Development (3W)

(See Political Science 360.)

370. Social and Intellectual History of the U.S. (3W)

American culture from earliest settlements to present day. Prerequisite: History 201, 202. Alternate years; offered 1991-92.

380. Seminar in the Twentieth-Century United States (3F)

Divergent historical interpretations of selected significant developments in United States history since 1900. Prerequisite: History 202. Alternate years; offered 1990-91.

**History
and
Political
Science
(Cont.)**

- 400. History of Russia (3S)**
Political, social, and diplomatic activities in the Russian sub-continent with special emphasis upon twentieth-century developments.
- 410. Latin America (3S)**
Colonies of Latin America, their struggles for independence, and the trends and developments since independence.
- 420. East Asia (3F)**
Survey of East Asia (China, Korea, Japan), exploring the traditional sources of its civilization: political, socio-economic, and cultural. Emphasis is upon the impact of the West and the consequent evolution of modern East Asia. Alternate years; offered 1991-92.
- 430. Southeast Asia (3S)**
Historical development of mainland and island Southeast Asia with particular stress upon the traditional societies of the area and the sources of its civilization. The impact of and response to the West provides a focus for the study of present-day Southeast Asia. Alternate years; offered 1990-91.
- 440. Middle Eastern History Since A.D. 600 (3S)**
The origin and expansion of Islam, the Ottoman Empire, colonialism and nationalism in the Middle East in the nineteenth and twentieth centuries. Alternate years; offered 1991-92.
- 450. Church History (3F)**
(See Religion 326.)
- 460. Marxism/Leninism (3S)**
Ideologies and governing principles of Marxist or Communist societies through an examination of the theories of Marx and Lenin and their corollaries. Prerequisite: History 302 or 400. Alternate years; offered 1991-92.
- 470. Seminar in Historiography (3W)**
Research and discussion designed to familiarize the History major with the theories, ideas, concepts, and major figures which have contributed to the development of the body of historical interpretation and historical understanding.

POLITICAL SCIENCE

- 200. Introduction to Political Science (3S)**
Designed to introduce beginning students to the study of Political Science, with emphasis on the general areas comprising Political Science as a discipline, including relevant empirical theories and methods concerning each.
- 210. United States Government (3F)**
Theories underlying the state, the formation of the Federal Union, the functions of departments, and the duties as well as the relation of the several states to the Federal Government.
- 310. State, City, and Rural Government (3W)**
States in the nation, their constitutions, problems of administration, departments, officials, and their duties, and some present trends from states' rights to centralization.
- 325. Seminar in State and Local Government (3I)**
The administrative, legislative, and judicial structure, procedures, and policies of state and local governments with special emphasis on the state level and on intergovernmental relationships. The course includes opportunities for student contact with

local and county public officials, legislators in the Virginia assembly, and administrative officials in the Virginia state government.

327. Public Policy Making (3W)

Examination of decision making processes in federal, state, and local governments, with attention to such contemporary problems as urban growth, welfare and poverty, ecology, consumer protection, and intergovernmental relations. Alternate years; offered 1990–91.

330. American Political Parties (3W)

Political parties and elections in the United States. Alternate years; offered 1991–92.

350. Methods of Social Research and Data Analysis I (3W)

(See Sociology 350.)

351. Methods of Social Research and Data Analysis II (3S)

(See Sociology 351.)

355. Diplomatic History of the U.S. (3F)

(See History 355.)

360. American Constitutional Development (3W)

A survey of the development of the American Constitution through judicial interpretation. The nature of the judicial process, national-state relationships in the federal system, interrelationships of the legislative, executive, and judicial branches of the national government, individual civil rights and liberties will be analyzed. Alternate years; offered 1990–91.

400. History of Political Theory (3S)

Analytic survey of political thought from Socratic principles to modern ideologies. Alternate years; offered 1990–91.

410. Comparative Government (3S)

Descriptive analysis of the major European political systems of the current period. Alternate years; offered 1991–92.

420. Government of the U.S.S.R. (3W)

Emphasis on the historical background, the role of the Communist Party, the machinery of government, and Soviet ideology including Marxist-Leninist theoretical concepts. Alternate years; offered 1991–92.

430. International Relations (3F)

Basic issues and areas of conflict among the states in the contemporary world, and organizations for the conduct of international relations with particular reference to the United Nations. Alternate years; offered 1990–91.

436. The United Nations (3I)

History, background, and structure of the United Nations, charter provisions of the U.N., political and functional roles of the six major organs of the U.N., functions and decisions of the general assembly, the security council, and the secretary general.

460. Marxism/Leninism (3S)

(See History 460.)

470. Seminar in Political Science (3W)

Research and discussion designed to familiarize the Political Science major with the theories, ideas, concepts, and major figures which have contributed to the development of the body of literature comprising Political Science.

340. Regional Geography (3F)

Geography of the major geographic and cultural regions of the world. Impact of physical environment upon culture and civilization of the regions. Alternate years; offered 1990-91.

350. Physical Geography (3F)

The importance of land forms, weather and climate, natural vegetation, soils, minerals, and their impact upon man's cultural development. Alternate years; offered 1991-92.

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A major in Home Economics consists of a minimum of 30-45 units depending upon the area of specialization. Home Economics 110 is required and Speech 200 is recommended for all students majoring in Home Economics. A student may elect a specialization in:

Home Economics Education: required are a minimum of 45 units in Home Economics including Home Economics 102, 110, 201, 321, 340, 400, 430, 450, 471, 481, and one additional course numbered 300 or above in each of the five areas of home economics: textiles/clothing, nutrition/foods, child development/family life, interior design/housing, and consumer studies/management. Professional education requirements for certification at the secondary level are: Observation and Teacher Aiding, Education 300, 310, 366, History 201, Health and Physical Education 200 and a third activity course.

General Home Economics: required are a minimum of 30 units in Home Economics including Home Economics 110 and at least one course in each of the five areas of home economics: textiles/clothing, nutrition/foods, child development/family life, interior design/housing, and consumer studies/management. Remaining required units are to be selected in consultation with the student's advisor based on career objective (e.g., day care, home economics extension, gerontology).

Fashion Merchandising: required are Home Economics 102, 110, 230, 304, 306, 401; 460 or 480; and 12 units in supporting fields including Business 100.

Interior Design: required are Home Economics 110, 230, 303, 321, 322, 323, 330, 425; 460 or 480; Art 111, 112, 211; 231 or 232; Business 100.

Nutrition and Food Science: required are Home Economics 110, 201, 240, 250, 315, 350, 415, 416, 417; twelve units in natural science including Chemistry 142, 143; nine units in Business from the following courses: Business 100, 355, 410, 415, 420.

A minor in Home Economics consists of 18 semester hours, nine hours of which must be from courses numbered 300 or above.

102. Clothing Selection and Construction (3W)

Factors influencing fashion, including the sociological and psychological aspects of clothing, wardrobe analysis, and basic construction. Three three-hour laboratories per week.

110. Orientation to Home Economics Professions (3F)

An exploration of the field of Home Economics and its career opportunities.

201. Food Science (4S)

Scientific principles involved in basic cookery will be investigated with emphasis on

quality characteristics and product evaluation. Structure, composition, and nutritive value of foods will be studied as well as food selection, storage, preparation, processing, and meal management techniques. Three hours lecture and six hours laboratory per week. Alternate years; offered 1991-92.

211. Computerized Diet Analysis (1F)

Self-paced study designed to determine nutrient and caloric intake with comparisons to recommended dietary standards. "Hands-on" use of the microcomputer is featured. Credit may not be received for both Home Economics 211 and Home Economics 240. Offered on demand.

212. Dietary Weight Management (1W)

Food consumption patterns and eating habits will be examined through self-examination resulting in a dietary plan for life-long modification of diet and eating behavior. Offered on demand.

220. Flat Pattern Design (3F)

Development of dress designs, utilizing the principles of flat pattern design and fitting. An original garment is designed and constructed as becoming to the individual. Three three-hour laboratories per week. Prerequisite: Home Economics 102. Offered on demand.

230. Textiles (3S)

Textile fibers, tests for identification, yarn and fabric constructions, methods of finishing, characteristics, uses and economics of textiles. Three hours lecture and three hours laboratory per week.

240. Contemporary Nutrition (3F)

Basic nutrition concepts, nutrition needs throughout the life cycle and current nutrition issues. Alternate years; offered 1991-92.

250. Cultural Food Patterns (3W)

The importance of food and nutrition in individual lives, communities, and nations. This course develops an understanding of food customs and the influence of culture and religion on food habits, with emphasis on the non-western or Third World nations. Problems in nutrition and solutions currently being tried or projected through national, international, and voluntary agencies are studied. Laboratory experiences emphasize cultural influences on foodways.

300. Tailoring (3F)

Problems in fitting and tailoring techniques as applied in the construction of coats and suits. Three three-hour laboratories per week. Prerequisite: Home Economics 102. Alternate years; offered 1990-91.

301. Family Clothing (3W)

Clothing needs throughout the life cycle and construction of selected projects requiring advanced techniques. Two lectures and two three-hour laboratories per week. Prerequisite: Home Economics 102. Offered on demand.

302. Fabric Design (3F)

Study of methods of fabric construction and design both structural and applied. Application of principles of art and design to designing fabric or original pattern and constructing a garment from that fabric. Two lectures, six hours laboratory per week. Prerequisite: Home Economics 102, 210, and 230. Offered on demand.

303. Applied Design (3W)

Basic methodology of working with materials in special projects useful in interior design. Projects to be included are: furniture refinishing, upholstering, seat caning,

350. Developmental Nutrition (3F)

Nutritional needs throughout each phase of the life cycle will be emphasized. Instructional delivery appropriate to each age group will be stressed. Alternate years; offered 1990–91.

400. Child Growth and Development (3FWS)

Physical, psychological, and social development of the child in the family. Provisions are made for observing and working with preschool children. Prerequisite: Sophomore, Junior, or Senior classification.

401. Historic Costume (3S)

Historical, literary, and artistic background of the costume of various countries from early civilizations to the present. Prerequisite: History 101, 102 or 103. Alternate years; offered 1991–92.

408. Parent and Child Relationships (3S)

Parent-child interactions through the child-rearing years. The roles of parents, the changing nature of the parent-child relationships throughout life-cycle stages, and changes in contemporary family structures with concomitant effects on parent-child relations are considered. Alternate years; offered 1990–91.

411. Day Care Management (3S)

Procedures for operating a day care facility. Topics include insurance requirements, personnel management, emergency preparedness, legal considerations, budgeting, and expense accounting. The needs of infants and children as well as handicapped adults and the aged are considered. Prerequisite: Home Economics 400 or permission of the instructor.

412. Perspectives on Aging (3W)

Introduction to geriatrics with emphasis on current issues including family and societal responsibilities, housing, clothing, economics, and nutritional needs. Opportunities are provided for observation of residential and intermediate facilities and for field experiences with appropriate agencies. Alternate years; offered 1990–91.

415. Advanced Nutrition (3S)

The function of nutrients, their metabolic roles, nutritional status assessments, and current research trends are emphasized. Experimental animals are used for nutritional deficiency studies. Prerequisite: Chemistry 142 or approval of department. Alternate years; offered 1990–91.

416. Quantity Food Management (3S)

Production service and management of large quantities of food will be learned through practice. Experiences with on-campus or local area food service providers will be made available by prior arrangement. Prerequisite: Home Economics 201 or permission of instructor. Offered on demand.

417. Diet Therapy (3W)

The relationship of diet to illness and the role of dietary intervention in the prevention and/or treatment of disease will be emphasized. Prerequisites: Home Economics 415 and Chemistry 142 or the equivalent. Alternate years; offered 1990–91.

425. Consumer Economics (3W)

Basic principles of economic systems in relation to standards in selection of goods and services and sources of reliable consumer information. Prerequisite: Economics 200.

430. Home Management (3F)

Management process and its significance on the quality of life experienced by families

**Home
Economics
(Cont.)**

with consideration of values, goals, standards, decision making and resources. Prerequisite: Junior or Senior classification. Alternate years; offered 1991-92.

450. Vocational Home Economics (3W)

Laws governing vocational home economics, its management, and vocational guidance. Problems in teaching home economics, organization and administration of vocational home economics programs in high schools, and the relation to state and national programs. Prerequisite: Home Economics 340. Alternate years; offered 1991-92.

452. Home Economics Curricula and Programs (3Sum)

Acquaints practicing home economists and other interested persons with current changes in home economics curricula and programs, including changes which are presently in effect or are being proposed for Virginia. Issues include but are not limited to the following: family life education curricula and methods; middle school curricula, occupational home economics programs; how to incorporate recent research and current issues in to consumer homemaking curricula; recent legislation concerning vocational funding; and home economics content areas of family clothing, home furnishings and equipment, consumer and family economics, human development over the life span, and individual and family interrelationships.

460. Professional Home Economics Practicum (3 or 6FWS)

Field experiences in occupations related to home economics. Opportunities, qualifications, skills, and professional standards and ethics are studied. Two hours per week in class and a minimum of 100 (3 units) or 200 (6 units) hours of field experiences. Prerequisite: Senior classification.

471. Occupational Home Economics (3F)

Methods of developing, teaching, and supervising programs in occupational home economics. Human relationships and career opportunities in home economics are included. Alternate years; offered 1991-92.

481. Supervised High School Teaching (10S)

(See Education 481.) Prerequisite: Home Economics 450 and 471.

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**Mathematics
and
Computer
Science**

A major in Mathematics consists of Mathematics courses numbered 120, 131, 132, 216, 231, 232, 400, 410, 420, 460, and nine additional units in Mathematics chosen from courses numbered 300 and above.

A major in Computer Science and Mathematics consists of courses in Computer Science numbered 110, 250, 320, 340, 420, and 440; courses in Mathematics numbered 120, 131, 132, 231, 325, 330, 340, 350, and 460; and either Business 201 and 202 or Physics 221 and 222. This major may not be taken as a dual major with mathematics.

A minor in Mathematics consists of courses numbered 120, 131, 132, 216, 231, and six additional units in Mathematics chosen from courses numbered 330 or above. This minor may not be taken with a major in either Computer Science and Mathematics or Physics and Mathematics.

A minor in Computer Science consists of Computer Science 101, 110, 250, 320, 340, 420; Mathematics 120, 131, 132, and 325. This minor may not be taken with a major in Computer Science and Mathematics.

MATHEMATICS

Mathematics and Computer Science (Cont.)

105. General Mathematics (3WI)

Specifically designed for students certifying in grades NK–4 or 4–8. Topics to be covered include: number systems, fractions, decimals, metric system, problem solving, and the basic concepts of two- and three-dimensional geometry. Emphasis will be placed upon understanding and the teaching of these concepts. Credit may not be received for both Math 105 and Math 109.

109. Algebra and Probability (3FWI)

Addition and multiplication of signed numbers, factoring, linear and quadratic equations, mathematics of finance. Credit may not be received for both Math 105 and Math 109.

110. College Algebra (3FI)

Addition and multiplication of signed numbers, factoring, linear equations, quadratic equations, graphing, and exponential and logarithmic functions. A student may be exempt from topical portions of the course by examination.

120. Precalculus Mathematics (3FW)

A precalculus course for students continuing in mathematics. Includes topics in algebra, functions and relations, and trigonometry. Prerequisite: Mathematics 110 or satisfactory performance on placement tests.

129. Calculus and Finance (3WS)

Probability, limits, differential calculus, graphing. Prerequisite: Math 109, 110, or satisfactory performance on placement tests.

130. Survey of Calculus (3S)

Differential and integral calculus for the student who needs a working knowledge of the subject but does not plan to pursue more advanced study in mathematics. Includes theory and application of limits, derivatives, and integrals. Prerequisite: Mathematics 120 or satisfactory performance on placement test. Credit may not be received for both Mathematics 130 and Mathematics 131.

131, 132. Calculus I, II (3W, 3S)

A unified course in analytic geometry and calculus of two dimensions. Prerequisite: Mathematics 120 or satisfactory performance on placement test. Credit may not be received for both Mathematics 130 and Mathematics 131.

200. Introduction to Statistics (3FWS)

Basic descriptive statistics, probability, hypothesis testing, correlation, and regression. Statistical computer software is used to analyze data. Prerequisite: Mathematics 109, 110 or satisfactory performance on placement test, and Computer Science 101. Persons who certify in elementary or middle education may use Mathematics 105 to satisfy the mathematics prerequisite.

216. Set Theory and Symbolic Logic (3F)

The first part of the course is devoted to naive set theory and includes the algebra of sets, relations, functions and orders. The second part is devoted to logic, including truth tables and first-order predicate calculus. Prerequisite: Mathematics 120 or satisfactory performance on placement test.

231, 232. Calculus III, IV (3F, 3W)

Partial differentiation, infinite series, multiple integrals, and differential equations. Prerequisite: Mathematics 132.

**Mathematics
and
Computer
Science
(Cont.)**

- 300. Modern Geometry (3W)**
Fundamental concepts of geometry, including projective and non-euclidean geometries, with emphasis on the axiomatic method. Prerequisites: Mathematics 132 and 216 or permission of the instructor. Alternate years; offered 1990–91.
- 310. Multivariable Calculus (3S)**
Vector analysis, vector calculus, differentiation and integration of functions of more than one variable. Prerequisite: Mathematics 232.
- 320. History of Mathematics (3I)**
Survey of the history of mathematics from ancient civilizations to the modern mathematics of the nineteenth century. Prerequisite: Mathematics 132. Alternate years; offered 1990–91.
- 325. Discrete Mathematics (3W)**
Topics include enumeration, partitions, combinatorial concepts, generating functions, and graph theory. Prerequisite: Mathematics 132 and Computer Science 250.
- 330. Linear Algebra (3W)**
Fundamentals of linear algebra, including vector spaces, matrix algebra, linear transformations, and bilinear and quadratic forms. Prerequisites: Mathematics 325 or Mathematics 216 and 231. Alternate years; offered 1991–92.
- 340. Mathematical Statistics (3S)**
Fundamentals of mathematical statistics including probability, probability density functions, moment generating functions, estimation theory, and statistical inference. Prerequisite: Mathematics 231 or permission of instructor. Alternate years; offered 1990–91.
- 350. Numerical Analysis (3S)**
Topics include iterative techniques for solving non-linear equations, numerical differentiation and integration, and differential equations. Prerequisites: Computer Science 110, and Mathematics 231. Alternate years; offered 1991–92.
- 400. Modern Algebra (3F)**
Abstract algebra, with emphasis on algebraic structures such as groups, rings, integral domains, and fields. Prerequisites: Mathematics 216 and 232 or permission of instructor. Alternate years; offered 1991–92.
- 410, 420. Introduction to Real Variables (3F, 3W)**
Real number system, topology of Euclidean Spaces, theory of limits, differentiation, integration, and infinite series. Prerequisites: Mathematics 216 and 232. Alternate years; offered 1990–91.
- 450. Special Topics (3S)**
Devoted to a subject chosen from among the various fields of mathematics in which regular courses are not offered. Possible topics include complex variables, number theory, topology, probability, and applied mathematics, as well as others. A student is allowed to take the course more than once, provided different topics are covered. Prerequisite: Mathematics 232 or permission of the instructor.
- 460. Seminar in Mathematics, Computer Science and Physics (3W)**
Discussion and presentation of papers by students and faculty on problems of current interest in mathematics, computer science, and physics. Prerequisite: Senior standing with a major in Mathematics and Computer Science, or Physics, or permission of the instructor.

COMPUTER SCIENCE

100. Microcomputer Applications (1FWS)

Introduction to microcomputer applications and operating systems. Four hours lecture per week for three weeks.

101. Introduction to Interactive Computing (1FWS)

Designed to acquaint the student with the structure of the PRIME Computer file system and the commands which are needed to use the computer efficiently. Included are commands utilized in the PRIME Operating System, the text editor, and the file utilities. Four hours lecture and laboratory per week for three weeks. This course is prerequisite to all other Computer Science courses and to using the college computer.

102. Introduction to Microcomputers (1FWS)

Designed to introduce prospective users to the Apple microcomputer. Emphasis is upon personal and professional productivity software including word processing and database. Students are introduced to disk operating systems and elementary concepts of BASIC programming. Prerequisite: Math 105, 109, or 110.

105. BASIC Programming (2FWS)

Introduction of problem solving methods and algorithm development with emphasis on how to design, code, debug, and document programs using techniques of good programming style. Four hours lecture and laboratory per week for seven weeks. Prerequisite: Computer Science 101.

110. FORTRAN Programming (2W)

Introduction to problem solving methods and algorithm development with emphasis on how to design, code, debug, and document programs using techniques of good programming style. Four hours lecture and laboratory per week for seven weeks. Prerequisites: Computer Science 101 and Mathematics 120. Mathematics 120 may be a corequisite.

112. Programming in C (3I)

An introduction to problem solving methods and program design using the C language. Emphasis is placed on those features which are unique to the C language.

115. COBOL Programming (2S)

Introduction to problem solving methods and algorithm development with emphasis on how to design, code, debug, and document programs using techniques of good programming style. Four hours lecture and laboratory per week for seven weeks. Prerequisite: Computer Science 101.

250. PASCAL Programming (3F)

Continue the development of discipline in program design, in style and expression, in debugging and testing, especially for larger programs. Topics introduced are algorithmic analysis, string processing, recursion, internal search/sort methods, and simple data structures. Prerequisite: Computer Science 110.

306. Graphics and Sound Utilizing Microcomputers (3I)

Using BASIC and some machine language programming, students receive a thorough introduction to graphics and sound on microcomputers. The course is project-oriented emphasizing hands-on experience in creating applications of graphics and sound in the solution of various problems, for example, in mathematics, science, and computer science. Prerequisite: Math 120 and experience with BASIC.

320. File Processing (3W)

Provides the foundation for applications of data structures and file processing techniques. Topics include system specification, design and testing with emphasis on

Mathematics and Computer Science (Cont.)

**Mathematics
and
Computer
Science
(Cont.)**

structuring data on bulk storage devices. Prerequisite: Computer Science 250. Alternate years; offered 1991–92.

340. Introduction to Computer Systems (3W)

Provides an introduction to computer systems and computer architecture. Topics include the organization and structuring of the major hardware components of computers, the mechanics of information transfer and control within a digital computer system, and fundamentals of logic design. A study is also made of the PRIME macro assembler. Prerequisite: Computer Science 250. Co-requisite: Mathematics 325. Alternate years; offered 1990–91.

420. Data Structures (3S)

Introduction to commonly used computer data structuring techniques. Analysis and design techniques are applied to nonnumeric algorithms which act on data structures. Topics include graphs, stacks, queues, lists, trees, sorting, searching, and memory management. Prerequisite: Computer Science 250 and Mathematics 325. Alternate years; offered 1991–92.

440. Operating Systems (3S)

Introduction to the major concept areas of computer operating systems principles. Topics include memory management, process management, system structure, and evaluation and recovery procedures. Prerequisite: Computer Science 340. Alternate years; offered 1990–91.

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Music

A major in Music consists of courses numbered 120, 121, 122, 220, 230, 241, 242, 243, 300, 311, 312, and twelve units in applied music (eight units in the major performance area and four units in the minor performance area). The requirement in applied music includes satisfactory completion of two years of keyboard instruction before graduation. The concentration also includes a requirement of performance in an ensemble for each year the student is in residence. In addition to the year-long ensembles for which credit is given, other ensemble opportunities are provided which meet this requirement. Two jury examinations are required each year in the student's performance area and, in addition, a senior recital is required.

Teacher certification, in conjunction with the requirements for a major in Music, consists of courses Music 100, 211, 212, 213, 214, 422, 436, 471, and 481 for all prospective teachers; and, in addition, Music 322 and 424 for choral/voice teachers; and Music 321 and 423 for instrumental teachers. Vocal/choral certification requires a major in voice or keyboard and a minor in keyboard or voice. Instrumental certification requires a major in band or orchestral instrument and a minor in band, orchestral, or keyboard instrument. Also, all students wishing certification must complete the following: Education 300, 305, 310, and 365 or 366; Health and Physical Education 200 and a third activity course; History 201; and an additional hour beyond the general education requirement in science or mathematics which may be met with Computer Science 101.

A minor in Music consists of Music 120, 121, 122, 220, 230, eight units in applied music in the major performance area numbered 300 or above, two additional courses chosen from the following: Music 241, 243, 300, 311, 312, and participation in a performing ensemble during each year the student is in residence. In addition to the year-long ensembles for which credit is given, other ensemble opportunities are provided which meet this requirement. Two jury examinations are required each year in the student's performance area and, in addition, a senior recital is required.

A minor in Church Music consists of 19 units including Music 322, 340, 480 or an equivalent experience, and the remaining units chosen from the following: Music 300, 361 or 362, 400, 422, 424, 490.

100. Voice Methods (1F)

Development of the singing voice; posture, breathing, scales, vowels, consonants, placement, diction, pitch, intonation, intervals, vocal resonance; and choral and solo literature in several styles. Practical methods in teaching voice in the public schools. Three hours per week. Alternate years; offered 1990–91.

120. Sight Singing (2S)

Tonal and rhythmic development through exercises in sight singing and ear training. Solfege, part singing, rhythms, scales, intervals and other fundamentals of music.

121, 122. Beginning Theory (2F, 2W)

Scales, intervals, and melody writing; primary and secondary chords; and four-part writing. Dominant seventh chords and inversions; nonharmonic tones; elementary modulation (to the dominant and relative major keys); and keyboard harmony.

211. Brass Methods (1S)

Practical methods in the teaching, playing techniques, and care of brass instruments in the public schools. Three hours per week.

212. Woodwinds Methods (1W)

Practical methods in the teaching, playing techniques, and care of woodwind instruments in the public schools. Three hours per week.

213. String Methods (1F)

Practical methods in the teaching, playing techniques, and care of string instruments in the public school. Three hours per week.

214. Percussion Methods (1F)

Practical methods in the teaching, playing techniques, and care of percussion instruments in the public schools. Three hours per week.

220. Introduction to Western Music from 1500 to 1870 (3FS)

Listening and learning to recognize forms, styles, composers, and works in Western music from 1500 to 1870.

230. Introduction to Twentieth-Century Music (3WI)

Listening and learning to recognize forms, styles, composers, and works in Western music since 1870.

236. The Music and Art of Polynesia (3I)

The arts in traditional Polynesian culture and their relationship ceremonies, celebrations, religion, folklore, and daily life. One week is spent on campus to survey Polynesian culture and history in preparation for a ten-day trip to Hawaii. While in Hawaii, the class visits museums and historical sites and takes advantage of lectures and study tours offered by the University of Hawaii, the Polynesian Cultural Center, and the East-West Center.

241. Intermediate Theory (2F)

Continuation of Music 122 with the addition of modulation to closely related keys, less common chord progressions, realization of a figured-bass line, diatonic seventh chords and borrowed chords.

242. Form and Analysis (2S)

Form and analysis of the large forms of master compositions.

**Music
(Cont.)**

- 243. Advanced Theory (2W)**
Continuation of Music 241; altered and augmented sixth chords, other chromatic alterations, and twentieth century techniques.
- 300. Conducting (3W)**
Choral and instrumental conducting. Elements of conducting, use of the baton, score reading, instrumental transpositions, the organization of choral and instrumental ensembles, and the application of conducting suitable materials for these organizations.
- 311. History of Medieval, Renaissance, and Baroque Music (3F)**
Analytical study of the history of Western musical style from the codification of Gregorian Chant to 1750. Listening and reading assignments focus on specific composers and works as they relate to historical trends in musical style.
- 312. History of Classic and Romantic Music (3W)**
Analytical study of the history of Western musical style from 1750 to 1900. Listening and reading assignments focus on specific composers and works as they relate to historical trends in musical style.
- 321. Instrumentation (3W)**
Instruments of the orchestra and band as to their classification, range, fingering, tone-color, and general use. The course provides for writing and arranging of music for solo instruments, ensembles, band, and orchestra. Prerequisite: Music 243. Alternate years; offered 1991-92.
- 322. Choral Arranging and Literature (3S)**
A study of choral literature, styles, forms, and voicings from the Renaissance through the twentieth century, and the practice of arranging and composing in those styles. Historical considerations and performance practice are discussed, and criteria for selection of music for choirs are developed. Alternate years; offered in 1991-92.
- 327. Marching Band Techniques (2F)**
Rudiments used in marching bands and the study of a curriculum plan and the instructional procedures used in the presentation of a marching band show. Class meets three hours per week.
- 329. Keyboard Pedagogy (3IS)**
Separate studies of piano and organ teaching regarding teacher qualifications, teaching techniques, graded music courses, professional ethics, recital planning, and teaching procedures in the use of the electronic piano laboratory.
- 340. Church Music (3F)**
Church music, with work in the areas of history, hymnology, administration, graded choirs, choral techniques, choral literature, and worship. Alternate years; offered 1991-92.
- 361. Sixteenth-Century Counterpoint (2W)**
Sixteenth-century contrapuntal techniques. Class meets three hours per week. Prerequisite: Music 243. Alternate years; offered 1990-91.
- 362. Eighteenth-Century Counterpoint (2S)**
Eighteenth-century contrapuntal techniques, including fugue. Class meets three times per week. Prerequisite: Music 243.
- 400. Composition (2S)**
The study and practice of musical composition, both traditional and modern. Two two-hour sessions per week. Offered on demand.

412. Music Education for the Classroom Teacher (3W)

Introduction to the melodic and harmonic instruments used in the elementary school. Selection and presentation of rote songs, activity songs, creative activities, rhythmic training, and listening program of grades K–6. Prerequisite: Admission to the Teacher Education Program.

422. Music Education in the Elementary School (3S)

Introduction to the melodic and harmonic instruments used in the elementary school. Selection and presentation of rote songs, rhythmic activities, creative activities, and listening program of grades K–6. Credit may not be received for both Music 412 and 422. Prerequisite: music major.

423. Band Organization and Administration (3S)

Designed to prepare students to develop methods of teaching and supervising instrumental music programs in the public schools. Alternate years; offered 1990–91.

424. Choral Organization and Administration (3S)

The study and practice of choral methods and techniques; administration and development of choirs of various age groups. Alternate years; offered 1990–91.

436. Music Education in the Secondary School (2W)

The methodology and philosophy of teaching music in the secondary school. The role of performance and nonperformance classes and the supportive elements in a music education program. Class meets three hours per week.

471. Supervised Teaching of Music in the Elementary or Middle School (5FS)

Supervised observation and teaching of music in elementary or middle schools of nearby counties and cities. A total of two hundred hours of observation and teaching (a minimum of one hundred twenty hours of teaching) is required in Music 471 and 481.

481. Supervised Teaching of Music in the Secondary School (5FS)

Supervised observation and teaching of music in secondary schools of nearby counties and cities. A total of two hundred hours of observation and teaching (a minimum of one hundred twenty hours of teaching) is required in Music 471 and 481.

ENSEMBLES

Ensemble members are chosen by audition and must attend a minimum of two rehearsals per week for the entire academic year to receive credit. Students engaging in interterm studies involving off-campus work are excused from ensemble participation while they are away. A maximum of four units of credit in ensemble participation may be applied toward graduation.

441. Concert Choir (One unit credit per year FWS)

One may be a member of either the Oratorio Choir or the Concert Choir, but to receive credit, one must be a member of both. An oratorio is performed in the Winter Term and Concert Choir tours are made in the Spring Term.

442. Chorale (One unit credit per year FWS)

A number of campus and off-campus appearances are made throughout the year. Pre-session rehearsals are required. Co-requisite: Music 441.

443. Symphonic Band (One unit credit per year FWS)

Several concerts are given each year. Serious literature of both large and small dimensions is used.

**Music
(Cont.)**

444. Stage Band (One unit credit per year FWS)

Playing contemporary arrangements as well as the revered "charts" of the big bands from the 1940s and 1950s. The band performs for many campus functions, and it tours in the Spring Term.

APPLIED MUSIC

A student may register simultaneously for one or two applied music courses with the approval of his adviser and the music faculty. Two units credit are earned only through participation in applied music for the Fall, Winter, and Spring Terms of a single academic year. With the approval of the department, a student may simultaneously earn 4 units of credit in one applied music.

Piano 101 and 201 utilize the piano laboratory in Memorial Hall. The student attends two hours per week during Fall, Winter, and Spring terms. Piano 101 includes rudiments of music reading and keyboard technique leading to the playing of melodies with primary chords. Piano 201 develops basic keyboard techniques leading to secondary chords, 4-part hymn style harmony, accompaniment patterns and some basic keyboard repertoire.

For a new applied music student, the number of his course is determined by an audition before a member of the music faculty. The number designations of the applied music courses are as follows:

100 level. Beginning student.

200 level. Second year for beginning student.

Prerequisite: 100 level in same area or consent of the music faculty.

300 level. First year for advanced students.

Prerequisite: Consent of the music faculty.

350 level. Second year for advanced students.

Prerequisite: 300 level in same area.

400 level. Third year for advanced students.

Prerequisite: 350 level in same area.

450 level. Fourth year for advanced students.

Prerequisite: 400 level in same area.

The unit digit in applied music course numbers designates the specific applied music. For example:

101 Beginning piano

102 Beginning organ

103 Beginning voice

104 Beginning woodwind instruments

105 Beginning brass instruments

106 Beginning percussion instruments

107 Beginning strings

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**Philosophy
and
Religion**

A major in Philosophy and Religion consists of not less than 30 units with a minimum of 12 units each from Philosophy and Religion, the remaining units composed of courses approved by the department.

A minor in Philosophy and Religion consists of 18 units of credit in Philosophy and Religion.

A minor in Peace Studies consists of 18 units of credit including Religion 240, 420, Philosophy 340, and three of the following: Philosophy 205, Religion 356, History 340, Political Science 420, 430, 436, Economics 430, English 205, and Sociology 325. Courses which are listed on a student's plan of the major in Philosophy and Religion are excluded.

English 120 is prerequisite to all courses in Philosophy and Religion. Religion 210 or 220 is prerequisite to all other courses in Philosophy and Religion.

**Philosophy
and
Religion
(Cont.)**

PHILOSOPHY

200. Introduction to Philosophy (3FS)

Philosophical inquiry into selected problems facing our age and our self-understanding. Topics include the new morality, knowing what is true, technological and scientific interests, and religious understandings. Prerequisite: Sophomore classification or permission of the instructor.

208. Philosophical Analysis of Popular Culture (3I)

A systematic philosophical analysis of the major entertainment media of modern American culture aimed at determining the values reflected in and arising from popular movies, television, comics, music, and literature. Students will select and research materials from the most popular national media, assessing the reasons for their extreme popularity.

210. Logic (3W)

Examination of the logic of everyday thought. Common fallacies and valid reasoning in the argumentative process. A brief introduction to symbolic logic is included. Alternate years; offered 1990–1991.

304. Philosophy of Science (3S)

Interaction of philosophy and science which affects man's understanding of the physical universe, life, the mind, and human values. Investigations are made into methods of research, physical evidence defining our universe, the principle of relativity, the uncertainty principle, predictive knowledge, and related topics. Alternate years; offered 1990–91.

311. The Classical Mind (3F)

A careful examination of some of the primary works of Plato and Aristotle. The development of certain issues into the Medieval era is traced and the original contributions of major Medieval thinkers, especially Augustine and Aquinas, are assessed. Alternate years; offered 1991–92.

312. The Evolution of the Modern Mind (3W)

The primary works of certain major philosophers who have shaped our intellectual history. Emphasis is placed on Descartes, Spinoza, Leibnitz, Hume, Locke, Kant, and Hegel. The basic philosophical turning-points in the modern history of our civilization are highlighted. Alternate years; offered 1991–92.

313. Contemporary Philosophy (3S)

Examination of the outstanding philosophical concerns of our milieu through the primary works of certain influential thinkers and schools of thought. Included are analytical philosophy, language analysis, existentialism, and process philosophy. Alternate years; offered 1991–92.

320. Business and Professional Ethics (3W)

A survey of the pressing issues confronting professionals in a technological era. Utilizing the insights of philosophical and religious ethics, the course examines the responsibilities of the professional person in business, medicine, law education,

**Philosophy
and
Religion
(Cont.)**

the ministry, and other fields. Problems considered include client confidentiality, accountability, peer review, and governmental regulation. Prerequisite: Junior or Senior standing. Alternate years; offered 1991-92.

340. Conflict Resolution and Mediation (3F)

Models for the analysis of human conflict, how to mediate interpersonal, interorganizational, and intergroup conflict. Alternate years; offered 1990-91.

420. Existentialism (3S)

Contemporary literary, philosophical, and theological existentialist writers. Primary authors included Kierkegaard, Camus, Sartre, and Heidegger. Alternate years; offered 1990-91.

430. Philosophy Seminar (3W)

Intensive study, research, and discussion in an interdepartmental field of current interest. The Departments of Psychology, Sociology, Economics, History, and others cooperate at times with the Department of Philosophy and Religion in presenting this seminar. Alternate years; offered 1990-91.

RELIGION

210. Old Testament (3FS)

History, literature, and faith of the Hebrew people in the Old Testament period. The Old Testament literature is examined utilizing the insights of archeology and literary and historical criticism. The impact of Hebrew history upon Western culture and the contemporary relevance of Hebrew theological insights are considered.

220. New Testament (3WS)

Christian beginnings with emphasis upon the literature and thought of the early Christian community.

300. Basic Christian Beliefs (3S)

Introduction to Christian theology. The central doctrines of the Christian faith are examined and various interpretations of those doctrines are evaluated. The course is taught in a seminar format. Alternate years; offered 1990-91.

340. Biblical Interpretation (3S)

Brief history of the interpretation of the Bible. Current theological schools of thought regarding interpreting the Scriptures. Problems of interpretation in an age of science. Exegesis of selected passages. Alternate years; offered 1990-91.

310. Jesus of History (3W)

The Gospels, with concentration on the Synoptics: Matthew, Mark, and Luke. The teachings and life of Jesus and the world in which He lived are examined in light of the tools and findings of recent scholarship. Alternate years; offered 1991-92.

312. Archeology and the Bible (3I)

Archeology as it related to biblical materials, especially in the Old Testament. An examination of findings and discoveries of the past two centuries and their relationship to biblical religion and faith, and to the history of the Hebrew people.

320. Religion in Life (3S)

Readings in, and discussion of, the nature and dimension of the religious life for contemporary man. Includes examination of the nature and language of religion, the problem of evil, suffering, secularization, doubt, disbelief, dimensions of decision-making, commitment, and criteria for a mature faith.

326. History of the Christian Church (3F)

Social and political structures of the Church, issues in theology and ethics. A survey of the history of the Church from the Apostolic Age to the present time. Alternate years; offered 1991-92.

328. History of the Church of the Brethren (3S)

From its beginning to the present day. An emphasis is placed upon understanding the church today in light of its historical development, and attention is paid to Brethren doctrine and ideals. Field experiences include visits to significant sites in Pennsylvania, Maryland, and Virginia. Prerequisite: Religion 210, 220, or permission of instructor. Alternate years; offered 1991-92.

330. Contemporary Christian Thought (3F)

Critical reading and discussion of writings of representative contemporary theologians and writers in the field of religion with a view to developing an awareness of basic issues and patterns in present theological thinking. Alternate years; offered 1990-91.

340. Religions of the Near East (3W)

Major living religions of the Near East stressing a sympathetic understanding of the illumination which is provided the adherents of each for daily living, as well as some of the cultural expressions of each in those societies where they flourish. Religions studied include Judaism, Christianity, Islam, Zoroastrianism, and African religion.

350. Religions of the Far East (3FS)

Major living religions of the Far East stressing a sympathetic understanding of the illumination which is provided the adherents of each for daily living, as well as some of the cultural expressions of each in those societies where they flourish. Religions studied include Hinduism, Buddhism, Chinese religion, and Shinto.

420. Christian Ethics (3S)

Personal and social ethical issues from the perspective of contemporary writings of Christian ethicists. Normative and contextual approaches. An examination of the relationship between religion and culture. Offered on demand.

426. The Church of the Brethren-Prospects for the 1990s (3I)

An examination of the Church of the Brethren heritage and values and current trends in Brethren life. The class visits and participates in activities at the New Windsor Service Center, the Baltimore First Church of the Brethren, and the Washington, D.C., City Church. Exposure is given to emerging patterns in church growth, service ministries, the urban and ethnic Brethren church development, and initiatives in Christian citizenship.

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A major in Physics consists of courses numbered 221, 222, 305, 311, 331, 340, 345, and 460, and 6 additional units from courses numbered 300 or above. Supporting courses for a major in physics consist of Mathematics 120, 131, 132, 231, and 232.

A combination major in Physics and Mathematics consists of 24 units in Physics including Physics 221, 222, 305, 340, 345, and 460; and 24 units in Mathematics including Mathematics 120, 131, 132, 216, 231, 232, and 300. This major is designed primarily for students wishing to certify to teach physics and mathematics at the secondary level and cannot be taken as a dual major with a major in mathematics or a major in physics.

A major in Physical Science consists of Chemistry 142, 143; Mathematics 120, 131, 132, 231, 232; Physics 221, 222, 340, 460; and six additional courses numbered 300 or

Physics (Cont.)

above chosen from the Departments of Chemistry and Physics. This major is designed primarily for pre-engineering students and cannot be taken as a dual major with a major in chemistry or a major in physics.

A minor in Physics consists of Physics 221, 222; either 305 or 306; 311, 331, and 340.

Students seeking teaching certification in physics must take at least one chemistry course.

105. Concepts of the Physical World (4FWS)

Introduction to the basic concepts of our physical world through demonstrations, lectures, and laboratories. Students explore questions such as: How do things move? What constitutes sound and light? What are the fundamental ideas of nuclear energy, lasers, and quarks? Four hours lecture and one laboratory per week.

110. Introductory Astronomy (4FS)

Designed to help the student appreciate and understand his physical environment and the methods of physical science through the study of basic astronomy. Topics include motions of celestial bodies; stellar masses, sizes, and distances; stellar structures and evolution; galaxies, and cosmology. Four lectures and one recitation or laboratory per week.

208. Sight and Sound (3I)

Explores the physics of phenomena commonly experienced through the senses of sight and hearing. Color, optics, music, acoustics, and other topics are investigated through demonstration, laboratory work, and problem solving. Prerequisite: Math 110.

221, 222. General Physics (4W, 4S)

First term: mechanics, properties of matter, heat, and sound. Second term: light, electricity, magnetism, and modern physics. Prerequisite: Mathematics 130 or 131 or concurrent enrollment in Mathematics 131. Four hours lecture and three hours laboratory per week.

301. Thermal Physics (3F)

Advanced thermodynamics, the behavior of physical systems and materials as a function of their temperature and any associated flux of thermal energy. Prerequisites: Physics 222, Chemistry 203, or permission of instructor. Credit may not be received for Physics 301 and Chemistry 301.

305. Electronics (4F)

Analog and digital electronics including diode and transistor operation, mathematical circuit analysis, operational amplifier applications, and digital logic gates. Prerequisite: Physics 222. Three hours lecture and six hours laboratory per week. Alternate years; offered 1991–92.

306. Digital and Microprocessor Electronics (4F)

Applications of digital circuits such as flip-flops, registers, counters, analog-to-digital converters and microprocessors leading to interfacing real-time data-collection equipment to microcomputers. Prerequisite: Physics 222. Three hours lecture and six hours laboratory per week. Alternate years; offered 1990–91.

311. Classical Mechanics I (3F)

Statics, simple harmonic motion, central force motion, Kepler's laws, changing mass, and center of mass coordinates. Prerequisites: Physics 221, 222 and Mathematics 132. Alternate years; offered 1990–91.

312. Classical Mechanics II (3W)

Fixed axis motion, rotating coordinates, coupled oscillations, and Lagrangian mechanics. Prerequisite: Physics 311. Alternate years; offered 1990–91.

331. Electricity and Magnetism I (3W)

Electrostatics, Gauss' law, magnetics, circuital law, and electromagnetic effects up to Maxwell's equations. Prerequisites: Physics 221, 222 and Mathematics 132. Alternate years; offered 1990–91.

332. Electricity and Magnetism II (3S)

Maxwell's equations, electromagnetic waves, dielectric properties, radiation, wave guides, and relativistic electrodynamics. Prerequisite: Physics 331. Alternate years; offered 1990–91.

340. Modern Physics (3W)

Relativity, wave-particle dualism, Schroedinger equation, wave functions, spectra, nuclear physics and elementary particles. Prerequisites: Physics 221, 222 and Mathematics 132. Alternate years; offered 1991–92.

345, 346. Experimental Physics (3W, 3S)

Consists of certain classical and modern experiments designed to give the student a basic understanding of experimental methods. One hour lecture and eight hours laboratory per week. Prerequisites: Physics 221, 222, and Mathematics 132. Alternate years; offered 1991–92.

420. Quantum Mechanics (3S)

Schroedinger equation, square well, harmonic oscillator, hydrogen atom, matrix methods, angular momentum, spin, and approximation methods. Prerequisites: Physics 340 and Mathematics 232. Alternate years; offered 1991–92.

450. Special Topics (3F)

Devoted to a subject chosen from some field of physics in which regular courses are not offered. The course may be repeated for credit, provided a different topic is covered. Prerequisite: Consent of instructor. Offered on demand.

460. Seminar in Mathematics, Computer Science, and Physics (3W)

(See Mathematics 460.)

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A major in Psychology consists of 30 units in Psychology courses including Psychology 200. Mathematics 200 is also required.

A minor in Psychology consists of 21 units in Psychology including Psychology 200, 302, 310, 340, and 350.

Psychology 200 is prerequisite to all other courses in the department.

200. Contemporary Psychology (3FWS)

The main streams of thought and basic data in contemporary psychology. Emphasis is given to the understanding of individual and social behavioral phenomena experienced by the student in terms of basic learning and development. Laboratory experience is given in systematic observation and manipulation of critical behavioral variables.

220. Abnormal Psychology (3W)

Symptoms, dynamics, treatment, and prognosis of the various forms of behavior pathology. Offered on demand. Prerequisite: Computer Science 101.

Psychology
(Cont.)

300. General Experimental Tactics (3W)

Laboratory methods of investigating human behavior with emphasis upon instrumental control, response quantification, utilization of digital logic equipment and the PRIME 4150 computer. Laboratory work encourages individual initiative and creative approaches to behavioral problems. Prerequisite: Computer Science 101.

302. Microcomputer Applications in the Laboratory (3F)

Hands-on experience with the ISAAC/APPLE-III configuration in real-time data acquisition and automated control in the laboratory. Problems dealing with analog and digital input devices, timing, counting, and controlling experiments, and the psychological laboratory will be covered. Students will learn to program LabSoft and use Apple Graphics in data analysis. Field trips will be scheduled to other laboratories. Prerequisite: Computer Science 101.

310. Group Research Methods (3S)

Experimental control through complex group research designs. Laboratory work utilizes groups of human subjects with K-sample, factorial, and least square designs. Special emphasis is given to appropriate analysis and interpretation of experimental data. The PRIME 4150 computer is utilized in statistical analyses. Prerequisite: Computer Science 101.

320. Individual Research Methods (3S)

Research problems requiring extensive data gained from a small number of subjects. Experiments involve sensory and perceptual thresholds and steady-state performance utilizing normal and psychotic human subjects and animals. Experience is gained in on-line, real-time computer use in behavior research with emphasis placed on validity and reliability of experimental data. Prerequisite: Computer Science 101.

330. Fundamentals of Learning and Cognition (3I)

Basic concepts relating to respondent and operant learning effecting the development, maintenance, and change of behavior. Special attention is given to the topics of attention, memory, and cognitive development. Basic concepts operant learning is demonstrated through laboratory experience with animals.

340. Modification of Behavior (3I)

Basic concepts within respondent and operant learning relating to the development, maintenance, and change of human behavior. Particular attention is given to behavioral development in educational settings and behavior modification in mental health settings.

350. Assessment of Behavior (3F)

Theory and practice of observing and assessing the behavior of an individual. Special emphasis is given to the use of observational data in the development of predictive statements concerning behavior. Several standardized individual tests are included.

410. Psychophysiological Methods (3F)

Psychophysiological methods and approaches to the physiological basis of behavior. Special attention is given to motivation and arousal, learning and memory. Laboratory experience is gained in bioelectric recording, intercranial stimulation, gastric fistuli, surgical procedures with animals, and instrumental behavioral evaluation techniques. Prerequisite: Computer Science 101.

415. Marine Animal Behavior (3I)

Behavior of marine vertebrates and invertebrates in controlled aquarium experiments and underwater field study on tropical reefs. The first week is spent on the Bridgewater campus in intensive study of behavioral processes in marine animals. The last two

weeks are spent collecting data in the Bahamas. Prerequisite: Psychology 200 and scuba certification.

420. Behavior Problems (3W)

Physiological psychology with special emphasis upon current techniques for evaluating behavioral phenomena resulting from surgical intervention, pharmacological agents and chronic indwelling cranial electrodes. Laboratory work utilizes instrumental reward training, avoidance training, discrimination training, and threshold determination with rats, pigeons, and cats.

440. Social Behavior (3S)

Experimental analysis of interpersonal behavior, with particular emphasis on small group processes.

450. Philosophy of Behavioral Science (3F)

Philosophical issues which have guided the development of behavioral science. Specific attention is given to the historical development of such issues as mind-body, measurement and operationism, reality and knowledge, inductive and deductive thinking, levels of explanation, and theoretical constructs.

460. Seminar in Contemporary Psychology (3S)

Issues, problems, and concerns in contemporary American psychology.

470. Special Topics (3FWIS)

Devoted to a subject chosen from among the various fields of psychology. Possible topics include Psychological Development Perception, Motivation, Emotion, Consciousness, and Personality, as well as others in which regular courses are not offered. A student is allowed to take the course more than once provided different topics are covered. Prerequisite: Permission of instructor. Offered on demand.

481. Practicum in Behavior Modification (3)

Supervised practicum experience in behavior modification in clinical and educational settings. Prerequisite: Psychology 345.

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A major in Sociology consists of 30 units in Sociology including 200, 350, 351, 405, 420, and 450. Twenty-seven units must be taken at the 300 level or above. Supporting courses for the major in Sociology consists of Mathematics 200 and Computer Science 101.

A minor in Sociology consists of 21 units of Sociology, including 200, 350, 351, 405, 420. An additional six units shall be earned from the following options: Sociology 310, 315, 320, 345, and 450. Supporting courses for the minor consist of Mathematics 200 and Computer Science 101.

A minor in Social Work consists of 21 units of Sociology and Social Work, including 200, 255, 310, 355, 405, 455, and one chosen from 315, 320, 345, 350, or 420. Supporting courses for the minor consist of Mathematics 200, Computer Science 101, and at least three units in Sociology 480 or 481.

Sociology 200 is a prerequisite to all other courses in the department except Sociology 220 and 300.

**Psychology
(Cont.)**

Sociology

Sociology
(Cont.)

200. Principles of Sociology (3FS)

Study of man as a social being and the significance of the group concept in understanding human behavior; how sociological knowledge is accumulated and systematized through theory and social research. Consideration is given to culture, socialization, personality, social stratification, social institutions and associations, community, collective behavior, population and ecology, urbanization, industrialization, social change, and social disorganization.

220. Social Problems (3I)

Problems of population growth, environment and resource depletion, alcoholism and drug addiction, crime and violence, inequality and poverty, unemployment, alienation, and several others are studied. Development of public awareness, role of social movements, theoretical approaches, value conflicts, interest groups and power struggles, and examination of proposed solutions are also included.

300. General Anthropology (3F)

Examination of human biology and evolution as seen through genetics, races, archaeology, and prehistory; and the diversity and uniformity of human behavior as seen through cross cultural studies. The growth and spread of culture in time and space are reviewed; the impact of urbanization, industrialization and technological trends on the nature and quality of man's life are examined.

307. Cultural Dynamics of Contemporary Spain (3I)

Cultural heritage and dynamics of Spain, with emphasis upon cultural diversity and change. A 15-day tour of important Spanish cultural centers, including Madrid, Toledo, Segovia, Cordoba, and Granada. Cultural contrasts are explored during visits to Gibraltar and the northern African country of Morocco. The effects of modernization, as well as the political, economic, and cultural choices facing contemporary Spain.

310. Criminology (3W)

Categories, incidence, and measurement of crime together with theories pertaining to the causes and treatment of crime and offenders. Definitions of criminal behavior, criminal law, law enforcement, the criminal justice system, and correction system are examined within the social and ideological context of American life. Alternate years; offered 1991-92.

315. Religion in Society (3S)

Nature and role of religious beliefs, behavior, and institutions in the Western World. A comparative approach is used to examine the relationship between social context and religious experience. Theory and research regarding the changing nature of religion in the modern world are examined. Alternate years; offered 1990-91.

320. Sociology of the Family (3W)

Examination of the human family historically in several ancient societies and comparatively in various contemporary cultures with major emphasis placed upon the modern American family. Included are such topics as the family and personality, emotional interaction in the family context, expectations and roles, child rearing, family life cycles, family conflicts and accommodations, family crises, and the family in transition.

325. Development and Underdevelopment in the Modern World (3S)

Various tensions, dilemmas, and theoretical and policy issues related to the position of Third World countries—in the modern world. Questions of urbanization, industrialization, modernization, westernization and economic resource and balance are

discussed. Various theories of development and underdevelopment are critically examined. Special attention is paid to the relationship between Latin America and the United States.

Sociology (Cont.)

335. Cultures of Africa (3W)

Survey of the racial, social, and cultural history of Africa in ancient and modern times. Attention is given to the impact of urbanization and to African responses to Western values and institutions as carried to the continent by the colonial powers. Contemporary political and socio-economic trends and problems. Prerequisite: Sociology 200 or 300 or permission of instructor. Alternate years; offered 1990-91.

345. Organizations in American Life (3S)

Analysis of the structure and functioning of organizations in American society. Patterns of coordination, communication, and control that exist in business and governmental organizations. Labor management strategies, bureaucracy, organizational cultures, hierarchies, and organizational networks are examined from a sociological, rather than a management, perspective. Alternate years; offered 1990-91.

350. Methods of Social Research and Data Analysis I (3W)

Scientific methods and their application in the study of social phenomena. Topics include the relation between theory and research, defining and operationalizing a research problem, research design alternatives, sampling, measurement, and elementary data analysis. The computer is used for data analysis. Prerequisites: Mathematics 200, Computer Science 101.

351. Methods of Social Research and Data Analysis II (3S)

The application of scientific research methods to specific research problems. Various measurement, scaling, and statistical techniques are utilized to address research problems defined by the students. The Statistical Package for the Social Sciences (SPSS-X) is used to analyze data from the National Opinion Research Center (NORC). The course culminates in a research paper that is presented orally. Prerequisite: Sociology 350.

405. The Community (3W)

Exploration of variables important to an understanding of the structure and function of urban and rural communities. These variables include demography, social ecology, value systems, social stratification, leadership, economics, politics, and organizational structure. Emphasis is placed on the urban community including such concerns as urban decay, housing, crime, pollution, transportation, poverty, minority problems, and urban renewal programs. Prerequisite: Permission of the instructor. Alternate years; offered 1990-91.

420. Social Inequality (3S)

Patterns of social stratification and important theories of the class structure. Stress is placed upon analysis of the American class system; acquaintance with major research in the field is emphasized.

450. Sociological Theory (3W)

The relation between theory and research with contemporary theoretical and research developments. Theory is treated as empirically based statements which explain the relationships among complex social variables. Alternate years; offered 1991-92.

**Sociology
(Cont.)**

RELATED COURSES: SOCIAL WORK

255. Introduction to Social Welfare (3F)

Traces the origins and development of current social welfare institutions and points up the philosophical and ethical considerations undergirding social welfare. The student is introduced to the various settings in which social work is practiced, the different roles played by the social workers, the values and activities of social work as a profession, and the methods employed by the social worker in providing services.

355. Counseling and Personal Development (3S)

Basic counseling skills course designed for students who plan to enter a helping profession. Helping skills such as attending, reflecting, clarifying, empathizing, supporting, examining feedback, confronting, and facilitating group process are treated. Goal setting, decision making, self-awareness and referral techniques are also included. Prerequisite: Sociology 255 or permission of instructor.

455. Interventive Methods in Social Work (3W)

Designed to prepare students for general problem solving activity in various social welfare settings. Orientation is given to methods employed in casework, group work, and community organization. Insights are developed whereby the student may relate observed behavior to psychological and socio-cultural factors affecting the individual. Prerequisite: Sociology 355 or permission of instructor.

481. Field Experience in Social Welfare (3 or 10FWIS)

Provides social work experience through placement in a social welfare agency. The placement may be arranged for a full-time experience during a ten-week term or the three-week Interterm or on a part-time basis during a ten-week term. The experience is under careful supervision of both the agency and the sociology department. The student's interest influences the choice of an agency whenever possible. Approximately 120 hours of participation are required for three units of credit and 400 hours are required for 10 units. A maximum of 13 units of credit may be applied toward the 123 units required for graduation. Prerequisites: Sociology 200, 255, and 355.

* * * * *

Telecourses

Additional courses are offered via television broadcast by WVPT-TV, Harrisonburg, Virginia, in cooperation with the national Public Broadcasting Service. The typical course is presented in thirty half-hour televised lectures over a period of fifteen weeks and bears three semester units of credit. Descriptions of specific telecourses are printed in the semiannual Bridgewater College Telecourse Bulletin which serves as a supplement to the College Catalog. An orientation seminar, a midterm seminar, and appropriate examination sessions are administered on the Bridgewater College campus. Standard evaluation and grading practices are followed.

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THE BACHELOR OF GENERAL STUDIES DEGREE PROGRAM

The Bachelor of General Studies Degree Program is an individualized liberal arts degree program for the mature adult who seeks an alternate method of obtaining a bachelor's degree. The program is tailored to the student's personal and vocational needs and takes into consideration the individual's life experiences prior to matriculation.

Admission. A student, 30 years of age or older, may apply to the Dean for Academic Affairs for admission to the Bachelor of General Studies Program. The applicant must submit the following:

- a. High school transcript showing graduation from a secondary school or the equivalent,
- b. Official transcripts of all post-secondary studies,
- c. Three letters of recommendation, and
- d. A biographical essay summarizing the student's background and outlining the student's goals and reasons for pursuing the Bachelor of General Studies Degree Program.

The Dean for Academic Affairs assigns the applicant to a faculty sponsor who consults with the applicant to develop a set of degree requirements which are submitted to the Council on Education. Approval of the degree program by the Council on Education constitutes admission to the Bachelor of General Studies Degree Program.

Assessment of Experiential Learning. In the General Studies Degree Program, credits may be granted for satisfactory performance on the College Level Examination Program of Educational Testing Service.

In recognition that competencies which are learned outside the formal college environment may be included appropriately in a student's degree program, a student in the General Studies Program may submit to the Dean for Academic Affairs an application with documentation which will be evaluated independently by two faculty members and submitted to the Council on Education for final action. A maximum of 30 units of credit may be earned in this way.

Degree Requirements. A Bachelor's Degree in General Studies will be awarded upon completion of the following:

- a. A minimum total of 123 units of credit with a 2.00 cumulative quality point average,
- b. Demonstrated proficiency in general education,
- c. A minimum of 30 units of credit with a 2.00 quality point average in a major field,
- d. Satisfactory performance on a comprehensive examination over the major field, and
- e. Completion of an approved senior independent study project with a grade of C or better.

Fees. The college's regular application fee of \$15.00 is assessed at the time of application to the program. A student's individual program of studies determines which of the following fees will be paid:

Course work at Bridgewater College	\$230 per unit
Prior learning credit	\$30 per credit



Responsibility of Students. It is the responsibility of each student to understand the academic standards of the College and the degree requirements of program in which the student is enrolled. Assistance in interpreting the requirements is available from academic advisors, the Registrar, and the Dean for Academic Affairs.

Registration. Students are expected to register promptly in the period devoted to registration at the beginning of each term. Failure to register at the proper time will result in the assessment of a late registration fee. The College accepts no responsibility for holding room reservations or providing living accommodations for students who fail to register on the days designated for that purpose.

By permission of the Dean for Academic Affairs, one may make adjustments in his or her program of studies during the first week of classes. While a new course may not be entered, one may be cancelled after that time, provided permission is obtained. In this event, a grade of WP, WF, or U will be shown on the permanent record.

Class Attendance. Regular class attendance is expected of all students and attendance records are kept. Responsibility for protecting the academic interests of the student and the College rests with the student and the instructor. A student who persists in being absent from class will be reported to the Dean for Academic Affairs with whom the student must have a conference. At the discretion of the instructor and the Dean for Academic Affairs, the student may be withdrawn from the course with a WF grade and may possibly be withdrawn from the College.

Excuses for unavoidable absences must be reported to the instructor at the first meeting following the absence. Absences which occur because of college activities approved by the Dean for Academic Affairs will be reported in advance to the Dean for Academic Affairs by the instructor sponsoring the activity, and the Dean will notify the instructors of the excused absences involved.

Classification of Students. A student who has earned 25 units or less is classified a freshman; 26 to 59 units, a sophomore; 60 to 89 units, a junior; and 90 units or more, a senior. A student who is permitted to carry less than six units in a ten-week term is classified as a part-time student.

The classification of each student is determined at the beginning of a session, and it does not change throughout the academic year. An exception to this procedure is made in the case of students who achieve senior status within the year and plan to graduate by the end of the following summer session.

The Unit of Credit. The basis of credit is called a unit. A unit of credit is equivalent to one semester hour. A three-unit course meets four 60-minute periods per week for ten weeks. Two hours preparation are expected for each hour of lecture or recitation. A two-hour or three-hour laboratory or studio per week for a term receives one unit of credit.

In continuing education programs, Bridgewater College records one continuing education unit for ten hours of participation. Continuing education units are not applicable toward a degree.

**Academic
Regulations
(Cont.)**

Quality Point Average. Quality points are applied to work taken at Bridgewater College as follows: For each unit of credit with a grade of A, four quality points are assigned; with a grade of B, three quality points are assigned; with a grade of C, two quality points are assigned; and with a grade of D, one quality point is assigned. Grades of WP, WF, F, S, and U receive no quality points.

The quality point average is computed by dividing the quality points achieved by the units of credit attempted at Bridgewater College. All units for which a student enrolls are counted as units attempted except those units for which a grade of WP or S is received. However, a student may repeat course work in which he or she has received a grade of D, F, or WF, and, in the case of repeated work, the highest grade is used in computing the student's quality point average.

Work accepted for transfer to Bridgewater College counts as units earned. Units attempted and quality points achieved are not transferred. Hence, a student's quality point average, both cumulative and in the student's major concentration, is only dependent upon work attempted at Bridgewater.

The Grading System. A grade is assigned at mid-term and at the end of the term on each subject for which one is officially registered. Only the grades assigned at the end of the term are recorded on the permanent record. One of the following grades is issued for each course attempted on the campus: A, B, C, D, F, I, WP, or WF. For student teaching, grades of S or U are assigned. Courses carrying grades of S or U do not contribute to units attempted or quality points achieved nor do they figure in the quality point average, but appropriate units earned are credited to the student's permanent record. Each grade is interpreted as indicated below:

A—superior achievement.

B—above average achievement.

C—average achievement.

D—fair or below average achievement.

I—incomplete achievement. This grade may be given when the student has been unable to complete the course or has failed the final examination because of illness or emergency situation which is beyond control. The time and conditions for the removal of an I must be approved by the Dean for Academic Affairs when it is assigned.

WP—Withdrawn Passing. This grade indicates that the student's achievement in the course was satisfactory at the date of withdrawal. In order to receive it, the withdrawal must have the approval of the teacher of the course and the Dean for Academic Affairs before the end of the sixth week of a ten-week term, the second week of the Interterm, or permission to withdraw from college. In determining the grade point average, units with a grade of WP are not counted as units attempted.

WF—Withdrawn Failing. This grade indicates that the student's achievement in the course was unsatisfactory at the date of withdrawal. In determining the quality point average, units with a WF grade are counted as units attempted. This grade is not given during the first three weeks of a ten-week term.

F—unsatisfactory achievement. A grade of F carries no credit. Once this grade is assigned it will remain on the permanent record; however, the course may be repeated for credit.

S—satisfactory achievement.

U—unsatisfactory achievement. A grade of U carries no credit.

Grade Reports. Grade reports are made twice each ten-week term to students and to their parents. Parents are furnished special reports at other times upon request.

Minimum Scholarship Standards. Every student who is permitted to enroll at Bridgewater College is expected to make continuous progress toward his or her educational objective. At the end of each ten-week term a careful evaluation of the achievement of each student is made, and a student whose quality of performance is below the minimum scholarship standards as outlined below will either be placed on academic probation or suspended. The Council on Education is responsible for interpreting these standards and for hearing appeals concerning them.

A student who does not achieve a term quality point average or a cumulative quality point average equal to or greater than the standard appropriate to the student's classification will be placed on academic probation. A freshman must earn a quality point average of 1.60; sophomore, 1.70; junior, 1.80; and senior, 1.90.

While on academic probation, counseling by the Deans and his or her faculty advisor may result in curtailment of co-curricular activities. The academic probation status is recorded on the student's grade report, permanent record, and transcript of credits.

At the end of the academic year a student will be suspended if the student's cumulative quality point average is less than the value listed below corresponding to the number of total units enrolled by the student prior to the start of the academic year. "Total units enrolled" is a term used only for the purpose of determining the suspension standard which applies to a particular student. It is the sum of all units for which the student received grades (including withdrawal grades and repeated courses) and units accepted for transfer from other colleges and universities.

<i>Total Units Enrolled</i>	<i>Minimum Cumulative Quality Point Average</i>
25 or fewer	1.40
26–59	1.60
60–89	1.80
90 or more	1.90

With permission of the Dean for Academic Affairs, a student may attend summer session to attempt to raise his or her quality point average above the minimum required for continued attendance.

Following academic suspension, one is ineligible for readmission until one academic year has elapsed. Also, a student who withdraws from college at a time when his or her cumulative quality point average is below the standard required for continued attendance is ineligible for readmission for one year from the date of withdrawal. To be readmitted, a student must present evidence sufficient to convince the Committee on Admissions that he or she can meet the minimum scholarship standards. Failure to meet this standard of performance in one academic year will normally result in dismissal.

Overload Policy. Students are permitted to enroll in a maximum of 11 units without paying an overload fee. Normally only students on the Dean's List may apply to the Dean for Academic Affairs for permission to enroll in an overload (more than 11 units of credit including courses audited). Students who are permitted to enroll for an overload must pay the overload fee. An exemption to the assessment of the overload fee is made in the case of a student who enrolls in three four-unit courses for a total of 12 units. Also, the overload fee is not assessed when applied music lessons cause the student to be registered for an overload.

Degree Requirements



The curriculum of a liberal arts college, considered in the broadest sense, is a course of study planned and organized for the purpose of leading a student to a definite educational objective. The curriculum, however, is only one of several vital parts of a higher education; the other important constituents are the student, the teacher, the library, the student body, the co-curricular program, and the physical and intellectual environment. The good liberal arts college so organizes these vital elements of a higher education that they interact and give the student as much of a liberal education as he or she is capable of acquiring.

The curriculum at Bridgewater is divided into three parts, with each part having its own requirements and objectives. The first part is composed of General Education Courses. A few of these courses are required, but in most areas the student has options. The requirements in general education have been patterned to insure the student an understanding of persons and their cultural, social, and natural environment and a development of proficiencies, techniques, and understandings to enable one to successfully pursue higher educational goals and life in a highly developed economic and social order.

The second part of the curriculum forms the Field of Concentration, or the departmental major. Its purpose is to add depth in one field to the breadth of knowledge the student gained in the General Education Courses. It enables the student to work effectively in a major field after graduation or prepares one adequately for graduate or professional study.

Elective courses form the third part of the curriculum. A student is encouraged to elect courses which will increase skills and understandings in a major field, which will fall in fields in which the student has an avocational interest, and which will adequately meet professional and graduate school requirements. The Dean for Academic Affairs, the student's faculty advisor and the department chairman of the student's major field can help the student choose appropriate electives.

SPECIFIC REQUIREMENTS

1. A minimum of 123 units of credit must be earned. Forty-eight units must be chosen from junior-senior level courses.
2. A quality point average of 2.00 must be earned on all work attempted.
3. A minimum of thirty units and twenty-seven of the last thirty units of academic work must be earned in residence at Bridgewater College. In addition, at least nine units of the major must be completed at Bridgewater.

REQUIREMENTS IN GENERAL EDUCATION

Development of Western Culture

Six Courses

The six courses which meet the requirement in Development of Western Culture must be chosen from the courses listed below and from appropriate Interterm studies so that a minimum of one course is selected from each of the following:

English 201, 202, or 203.

History 101, 102, or 103.

Religion 210 or 220.

A course in Philosophy or an additional course in Religion from those listed under Development of Western Culture.

A course in Fine Arts chosen from: Art 231, 232, 245, 300; Education 355; English 330; Music 220, 230, 311, 312, 370, 412; Theatre 300, 320, or 370.

In addition, these six courses are chosen to include at least two courses from the Ancient and Medieval Period, one course from the Renaissance and Early Modern Period, and one course from the Contemporary Period. Those marked with an asterisk are especially recommended.

Ancient and Medieval Period

Art 231: Art History

*English 201: Western Thought in Literature: The Greek Foundation

English 341: English Literature to 1500

French 340: Literature and Life of the Middle Ages and the Renaissance

*History 101: Western Civilization to 1500

Philosophy 311: The Classical Mind

*Religion 210: Old Testament

Religion 220: New Testament

Religion 304: Biblical Interpretation

Religion 310: Jesus of History

Renaissance and Early Modern Period

Art 232: Art History

*English 202: Western Thought in Literature: The Renaissance

English 330: Shakespeare

English 340: Chaucer

English 351: Seventeenth-Century English Literature

English 361: Eighteenth-Century English Literature

English 401: American Literature to 1880

French 330: The Classical Period

French 350: Age of Enlightenment

German 325: Survey of German Literature I

German 350: Classicism

*History 102: Western Civilization from 1500 to 1815

**Degree
Requirements
(Cont.)**

History 201: United States Civilization
 History 320: Renaissance and Reformation
 Music 311: History of Medieval, Renaissance, and Baroque Music
 Music 220: Introduction to Western Music from 1500 to 1870
 Music 370: History of Dramatic Music
 Philosophy 312: The Evolution of the Modern Mind
 Spanish 420: Medieval and Golden Age Literature and Life
 Theatre 370: English Drama to 1800

Contemporary Period

Education 310: Foundations of Education
 *English 203: Western Thought in Literature: The Modern World
 English 371: Nineteenth-Century English Literature
 English 385: Modern Literature
 English 402: American Literature after 1880
 English 420: The Novel
 French 335: Survey of French Literature II
 French 410: French Culture and Civilization
 French 420: Literature and Life of the Nineteenth Century
 French 430: Literature and Thought of the Twentieth Century
 German 410: German Culture and Civilization
 German 420: German Literature of the Nineteenth Century
 *History 103: Western Civilization since 1815
 History 202: United States Civilization
 History 301: Modern Europe Prior to 1870
 History 302: Europe Since 1870
 Music 230: Twentieth-Century Music
 Music 312: History of Classical and Romantic Music
 *Philosophy 200: Introduction to Philosophy
 Philosophy 304: Philosophy of Science
 Philosophy 313: Contemporary Philosophy
 Philosophy 420: Existentialism
 Religion 300: Basic Christian Beliefs
 Religion 320: Religion in Life
 Religion 328: History of the Church of the Brethren
 Religion 330: Contemporary Christian Thought
 Religion 420: Christian Ethics
 Spanish 410: Spanish Culture and Civilization
 Spanish 440: Literature and Life of the Nineteenth Century
 Spanish 450: Literature and Thought of the Twentieth Century
 Theatre 320: Modern Drama

Courses which are not applicable to a single historical period but may be applied to the requirements in Development of Western Culture are:

Art 245: The Visual Arts
 Education 355: Art for the Early and Middle Education Teacher
 English 430: Tragedy: Studies in Tragic Vision
 Music 412: Music Education for the Classroom Teacher
 Religion 326: History of the Christian Church
 Theatre 300: Highlights in Theatre History

World Cultures

Two Courses

History 400: History of Russia
 History 410: Latin America

History 420: East Asia
 History 430: Southeast Asia
 History 440: Middle Eastern History Since A.D. 600
 Religion 340: Religions of the Near East
 Religion 350: Religions of the Far East
 Sociology 300: General Anthropology
 Sociology 325: Development and Underdevelopment in the Modern World
 Sociology 335: Cultures of Africa
 Spanish 335: Survey of Latin-American Literature
 Spanish 431, 432: Spanish American Literature and Culture

The Individual and Society

Three Courses

Of the three courses required in this area, one course must be chosen from three of the following disciplines:

Economics 200: Principles of Macroeconomics
 Political Science: (Any course)
 Psychology 200: Contemporary Psychology
 (Education 300 may be substituted for Psychology 200 by students admitted to the teacher education program.)
 Sociology 200: Principles of Sociology

The Natural Environment

Two Courses

Of the two courses required in this area, one must be chosen from biological science and one from physical science.

Biological Science:

Biology 100: The Nature of the Biological World
 Biology 201: Introductory Biology—Life at the Subcellular and Cellular Level

Physical Science:

Chemistry 102: The Earth and Its Physical Resources
 Chemistry 141: General Chemistry I
 Chemistry 142: General Chemistry II
 Physics 105: Concepts of the Physical World
 Physics 110: Introductory Astronomy
 Physics 221: General Physics

PROFICIENCY REQUIREMENTS

English Composition

Two Courses

English 110: English Composition, English 120: Composition and Literary Forms, and satisfactory performance on a standardized examination are required of each student. The standardized examination must be taken in the sophomore year or as soon as possible in the case of transfer students. Students who do not pass the examination will be referred to the Composition Proficiency Committee. (The requirements in English 110 and 120 may be fulfilled by appropriate performance on a placement test.)

Mathematics

One Course

The one course in mathematics must be Mathematics 109: Algebra and Probability, or a higher level course (except that Mathematics 105: General Mathematics may be substituted by persons seeking state teacher certification in grades NK–8 or 4–8.

Physical Education

Two Activities Courses

SPECIFIC DEGREE REQUIREMENTS

Candidates for the *Bachelor of Arts Degree* complete the above General Education program and the following foreign language requirement in lieu of the mathematics and science requirement for the Bachelor of Science Degree.

Foreign Language

Zero to Four Courses

Placement in foreign language is dependent upon a placement examination given at the College and upon the student's secondary school work. Successful completion of the intermediate level is required.

Candidates for the *Bachelor of Science Degree* complete the above General Education program and the following requirement in mathematics and science in lieu of the foreign language requirement for the Bachelor of Arts Degree.

Mathematics and Science

Two Courses

The Bachelor of Science Degree is offered with majors in a number of disciplines (see below). In addition to the mathematics and science courses chosen above, candidates for the degree must complete either one mathematics course and one science course or two science courses from courses numbered 120 or above in the Departments of Biology, Chemistry, Mathematics and Computer Science, and Physics.

REQUIREMENTS IN THE MAJOR FIELD

A departmental major consists of not less than thirty units and not more than 48 units of credit, including all prerequisite and supporting courses specified by the department. Exceptions to this limitation are made in the cases of the following interdepartmental majors: Computer Science and Mathematics, International Studies, Medical Technology, and Physical Science. A minimum of 18 units of credit must be chosen from a single department with related courses sufficient to bring the total to at least thirty units.

Near the end of the sophomore year or before the beginning of the junior year, a program of courses in the major department and related courses comprising the plan of the major is developed for each student by the student and his or her faculty adviser. A copy of this program must be approved by the Dean for Academic Affairs and filed in the office of the Registrar. Any changes in the proposed plan of the major must likewise have the approval of both the faculty adviser and the Dean for Academic Affairs and be recorded in the office of the Registrar.

Each student must earn quality points equal to twice the number of units of credit composing the plan of the major and show satisfactory achievement on a comprehensive examination covering the major. Suitable majors from which the student may choose are listed below.

Candidates for the Bachelor of Arts degree may elect any of the following majors; candidates for the Bachelor of Science degree may elect any of the majors marked by an asterisk: Art, Biology*, Business Administration*, Chemistry*, Computer Science and Mathematics*, Economics*, English, French, General Science*, German, Health and Physical Education*, Health Science*, History, History and Political Science, Home Economics*, International Studies, Mathematics*, Medical Technology*, Music, Philosophy and Religion, Physical Science*, Physics*, Physics and Mathematics*, Political Science*, Psychology*, Sociology*, Spanish.

A student who wishes to achieve a major in two fields must recognize the possibility that more than four academic years may be required to complete such a program. A student who pursues two major fields declares a primary major and a secondary major and must complete both programs, including satisfactory performance in each comprehensive examination. Candidates for graduation with honors and with two majors must meet the comprehensive examination criterion in each major as stated on page 30. No more than two major fields will be denoted on a student's permanent academic record.

Comprehensive Examinations. A candidate for graduation must pass a written comprehensive examination over the student's major field. The examinations are selected or made, administered, and graded under the direction of the student's major department chairman. This examination is administered prior to March 15 of the year in which the student is expected to finish the work for graduation.

A candidate for graduation whose written comprehensive is unsatisfactory is required to take an oral comprehensive as a check, and the student will not be eligible for graduation with honors. The oral comprehensive, if required, is administered prior to May 1 by the student's major department chairman with the assistance of two other professors appointed by the department chairman and the Dean for Academic Affairs. In case the achievement of the student is found unsatisfactory on the oral, the chairman of the committee reports immediately to the Dean for Academic Affairs who, with the assistance of the Council on Education, proposes a program for remedial action.

REQUIREMENTS IN THE MINOR FIELD

A minor consists of not less than 18 and not more than 27 units of credit specified by the department offering the minor. At least six units of the minor must be completed at Bridgewater College.

A program of courses comprising the minor is developed by the student, his or her faculty adviser, and the chairman of the department offering the minor. A copy of this program must be approved by the Dean for Academic Affairs and filed in the office of the Registrar. Any changes in the proposed plan of the minor must likewise have the approval of the faculty adviser, the chairman of the department offering the minor, and the Dean for Academic Affairs, and be recorded in the office of the Registrar.

In order to complete the requirements for a minor, a student must earn quality points equal to twice the number of units of credit composing the plan of the minor. Students may elect any of the following minors: Art, Biology, Business Administration, Chemistry, Church Music, Communications, Computer Science, Economics, English, French, German, History, Home Economics, Mathematics, Music, Peace Studies, Philosophy and Religion, Physics, Political Science, Psychology, Social Work, Sociology, Spanish, and Theatre and Speech.

ELECTIVE COURSES

In addition to the courses required for general education and major, elective courses sufficient to bring the total to at least 123 units are required. A minimum of forty-eight units of the 123 must be completed in courses numbered 300 or above.

Approximately ten courses, or 30 units, will normally be electives. These should be selected with care to fulfill needs for certification to teach, to enter graduate school, or for other special purposes. Students interested in teaching in the public schools should read the requirements for certification stated on page 68 and confer with the Chairman of the Department of Education. This should be done not later than the end of the freshman year.



**ORGANIZA-
TION OF
THE
COLLEGE
Board of
Trustees**

Term Expires 1990

G. STEVEN AGEE	Salem, Virginia
ERNEST W. AUSHERMAN	Jefferson, Maryland
ROBERT W. DRECHSLER	Bridgewater, Virginia
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Term Expires 1991

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J. MANLEY GARBER	Woodbridge, Virginia
MARION E. MASON	Madison Heights, Virginia
NATHAN H. MILLER	Harrisonburg, Virginia
RODNEY I. SMITH	Midland, Virginia
J. PAUL WAMPLER (Alumni Representative)	Manassas, Virginia

Term Expires 1992

DORIS N. ALBAUGH (Mid-Atlantic)*	Union Bridge, Maryland
PASCO M. BOWMAN, II	Kansas City, Missouri
J. MICHAEL FIKE (West Marva District)*	Aurora, West Virginia
DWIGHT E. HOUFF	Mt. Sidney, Virginia
LYNN N. MYERS (Virilina District)*	Rocky Mount, Virginia
PAUL W. PETCHER (Southeastern District)*	Chatom, Alabama
EDWARD M. YOUNG (Shenandoah District)*	Bridgewater, Virginia

Term Expires 1993

W. WALLACE HATCHER (Alumni Representative)	Broadway, Virginia
ARLENE R. MAY	Timberville, Virginia
L. MANNING MUNTZING	Washington, D.C.
CHARLES M. SACKETT	Westminster, Maryland
BARBARA C. STONE	Bassett, Virginia
WILLIAM D. WAMPLER	Harrisonburg, Virginia

Term Expires 1994

A. BARRY BLAY	Timberville, Virginia
B. MERLE CROUSE (Atlantic Southeast)*	St. Cloud, Florida
PAUL H. GEITHNER, JR.	Fairfax, Virginia
WILLIAM H. GROSECLOSE	Harrisonburg, Virginia
JAMES L. KEELER	Timberville, Virginia
PHILLIP C. STONE	Harrisonburg, Virginia
NELSON T. WETSEL	Harrisonburg, Virginia

* * * * *

WAYNE F. GEISERT	Bridgewater, Virginia
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**The geographic name in parentheses after the name of a particular trustee identifies the district of the Church of the Brethren which nominated the trustee prior to election by the Board of Trustees.*

**Board of
Trustees
(Cont.)**

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W. WALLACE HATCHER.....	<i>Chairman</i>
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PHILLIP C. STONE.....	<i>Vice Chairman for Educational Policy and Campus Life</i>
WILLIAM D. WAMPLER.....	<i>Secretary</i>
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Bridgewater	
MELVIN D. WAMPLER.....	<i>Treasurer</i>
Bridgewater	

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ROBERT M. McKINNEY	Westminster, Maryland
GARLAND F. MILLER, Chairman Emeritus.....	Bridgewater, Virginia
RUSSELL MILLER.....	Arlington, Virginia
H. GUS MUNTZING	Baker, West Virginia
R. DOUGLAS NININGER, Chairman Emeritus.....	Salem, Virginia
FRANK C. RITTENHOUSE	Timonium, Maryland
HARVEY H. SCOTT	Harrisonburg, Virginia
LOREN S. SIMPSON	Bridgewater, Virginia
ERNEST C. SPOERLEIN	Oakland, Maryland
R. LOWELL WINE.....	Roanoke, Virginia

1989-90
Office of the President

Wayne F. Geisert, A.B., Ph.D., L.L.D. *President*
Marlene C. Foley *Assistant to the President*
Mary Lou Miller, B.A. *Secretary to the President*

Office of the Provost

Dale V. Ulrich, B.A., M.S., Ph.D. *Provost*
Terrina L. Judy *Secretary to the Provost*

Academic Affairs

Carl H. Caldwell, B.A., M.A., Ph.D. *Dean for Academic Affairs*
Cynthia K. Howdyshele, B.S., M.B.A. *Registrar and Director of Internships*
Janet S. Stepp *Secretary to the Dean*
Bernice P. Boyce *Secretary in Registrar's Office*

Student Development

William D. Miracle, A.B., M.Ed., Ed.D. *Dean for Student Development*
Karen L. Atkin, B.S., M.A. *Assistant Dean for Student Development*
Carolyn G. Cline *Secretary to the Dean for Student Development*

Admissions

Brian C. Hildebrand, B.A., M.A., M.Ed. *Dean for Admissions*
John E. Sayre, B.A., M.Div., M.Ed. *Associate Director of Admissions*
Lisa A. Perry, B.A. *Assistant Director of Admissions*
Linda F. Stout, B.S. *Assistant Director of Admissions*
Tamara M. Hayslett, B.S. *Admissions Counselor*
Lisa W. Long, B.A. *Admissions Counselor*
Lisa A. McDaniels, B.A. *Admissions Counselor*
Lori A. Floyd, B.S. *Admissions Counselor*
Robert J. Washburn, B.S. *Admissions Counselor and Sports Information Director*
J. Mark Griffin, B.A. *Admissions Counselor*
Cynthia K. Hosaflook, B.S. *Secretary in Admissions Office*
Kay E. Kegerreis *Secretary in Admissions Office*
Carolyn W. Pirkey *Secretary in Admissions Office*

Financial Aids

J. Vern Fairchilds, Jr., B.A. *Director of Financial Aids*
Cindy K. Garletts, B.S. *Assistant Director of Financial Aids*
Louise C. Newell *Secretary in Financial Aids Office*

Alexander Mack Memorial Library

Ruth A. Greenawalt, B.S. in Ed., M.S.(L.S.) *Library Director*
Carin L. Teets, B.A., M.S.L.S. *Assistant Librarian for Cataloging*
Buu Duong, B.S., M.A., Ph.D. *Assistant Librarian for Acquisitions*
..... *Public Services Clerk*
Audrey K. Moats *Secretary in Library*
Phyllis R. Ward *Secretary in Library*

Career Planning and Placement

Saraona F. Minnich, B.A., M.S. *Director of Career Planning and Placement*
Madeline H. Hilbert *Secretary in Career Planning and Placement Office*

**Administrative
Officers
and
Staff**

**Administrative
Officers
and
Staff
(Cont.)**

C. E. Shull Computing Center

Theodore W. Flory, B.A., M.C.S. *Manager of the C. E. Shull Computing Center*
Dean Royce Neher, B.A., M.A., Ph.D. *Faculty Associate*
Lester D. Herman, B.S. *Computer Programmer*

Chaplain's Office

David G. Metzler, B.A., B.D., S.T.M., Th.D. *Chaplain*
Elizabeth E. Smith *Director of Religious Activities*

Director of Athletics

Thomas M. Kinder, B.A., M.S., Ed.D. *Director of Athletics*

Academic Support Staff

Daniel Antolik, B.A., M.A. *Head Football Coach*
Robert J. Stevens, Jr.*, B.A. *Assistant Basketball Coach*
Curtis L. Kendall, B.S., M.S. *Head Baseball Coach, Assistant in
Department of Health and Physical Education*
Kyle E. Gillenwater, Jr., B.S., M.S. *Assistant in the Department
of Health and Physical Education;
Assistant Football Coach;
Women's Softball Coach*
Alice H. MacPhail*, B.S. *Assistant in Theatre*
Kristee J.R. Trumbo, B.A. *Assistant in Swimming*
Jean Willi, B.A., M.S. *Assistant in Department of Health
and Physical Education*
Elaine K. Shank *Secretary in Flory Hall*
Bonnie M. Eckard *Secretary in Bowman Hall*

Health Service

Rufus C. Huffman, M.D.; J. Douglas Smith, M.D. *College Physicians*
Linda S. Bowers, L.P.N. *College Nurse*

Kline Campus Center

Charles A. Hill, B.A. *Director of Kline Campus Center
and Director of Activities*
Stephanie D. Patterson, B.S. *Assistant Director of the
Kline Campus Center*
Patricia H. Boshart *Switchboard Operator and Campus Center Receptionist*

Residence Hall Staff

Men's Residence Halls:

C. Davis Harris, Jr., B.A. *Resident Director of Wakeman Hall*
Clifton S. Hunt *Resident Director of Heritage Hall*
John D. Manson, B.S., M.A., M.Div. *Resident Director of Wright Hall*
Alan W. Berg, A.S., B.S. *Men's Resident Director Advisor*

Women's Residence Halls:

Carolyn S. Turner, B.S. *Resident Director of Blue Ridge Hall*
Leiauanna R. Allen, B.A. *Resident Director of Daleville Hall*
Vicky L. Entsminger, B.A. *Resident Director of Dillon Hall*
Susan H. Storrick, B.A. *Women's Resident Director Assistant*

Reuel B. Pritchett Museum

Thelma S. Replogle*, B.A.Director

Office of the Business Manager and Treasurer

Melvin D. Wampler, B.S., M.EdBusiness Manager and Treasurer

E. Dustyn Miller, B.S., M.B.A.Controller

Stacy A. McDonald, B.S.Assistant to the Business Manager

Marilyn T. EversBusiness Office Manager and Assistant in Insurance

Brenda L. ThompsonAdministrator for National Direct
Student Loan Program

Karen Sue ColawSecretary to the Business Manager and Treasurer

Belva M. Hill*Secretary in Business Office

Dorothy C. LongSecretary in Business Office

Marguerite M. Turner*Postmistress

Book Store

Leon W. Rhodes, B.A.Manager of the College Stores

Betty W. Vandevander*Clerk in Book Store

Edna C. Shickel*Clerk in Book Store

Buildings and Grounds (ServiceMaster Industries, Inc.)

James F. ShaffnerDirector of Environmental Services

Paul E. GrigsbyDirector of Housekeeping

Edward M. SolomonGrounds Supervisor

Elva S. HelmickSecretary in Buildings and Grounds Office

Food Service (Morrison's Custom Management)

Karl J. KwolekDirector

Carolyn J. SchuckmanAssistant Director

Office of the Director of Development

Brydon M. DeWitt, B.A., M.F.A.Director of Development

William R. Swecker, B.S.Associate Director of Development for Planned Giving

James M. Bryant, B.A.Assistant Director of Development
for Annual Giving & Alumni Relations

Cathy A. LinkAssistant Director of Development for
Foundation and Corporate Relations

Wendell P. Flory*, B.A., M.Div., M.A., D.Min.Director of
Church Relations

Neva A. Rybicki, B.A., M.A.Director of Public Information

Terrie Lynn GoldenSecretary to the Director of Development

Suzann L. MeyerhoefferSecretary in Development Office

Sandra H. ShifletSecretary in Development Office

Robin Y. JenningsSecretary in Development Office

Alice H. MacPhail*, B.S.Secretary in Development Office

Administrative Officers and Staff (Cont.)

*Part Time

Faculty

1989-90

- Wayne F. Geisert *President and Professor of Economics*
A.B., McPherson College; Ph.D., Northwestern University; L.L.D., Manchester College; Bridgewater College, 1964—
- Dale V. Ulrich *Provost and Professor of Physics*
B.A., University of La Verne; M.S., University of Oregon; Ph.D., University of Virginia; Bridgewater College, 1958–1961; 1964—
- * * * * *
- John W. Boitnott *Dean of the College, Emeritus*
B.A., Bridgewater College; M.A., University of Virginia; Ph.D., *ibid.*; L.H.D., Bridgewater College; Bridgewater College, 1947–1967.
- Raymond N. Andes *Professor of Foreign Languages, Emeritus*
B.A., Bridgewater College; M.A., University of North Carolina; Ph.D., *ibid.*; Summer Student, University of Paris, Institut d'Etudes françaises de Pau; Bridgewater College, 1946–1983.
- Emmert F. Bittinger *Professor of Sociology, Emeritus*
B.A., Bridgewater College; M.A., University of Maryland; B.D., Bethany Theological Seminary; Ph.D., University of Maryland; Bridgewater College, 1963–1988.
- Nell Kersh Boitnott *Assistant Professor of Education, Emeritus*
B.A., Bridgewater College; M.A., James Madison University; Bridgewater College, 1947–1967.
- J. Alaric Bowman *Dean of Students, Emeritus*
B.A., Bridgewater College; M.S., University of Pennsylvania; Graduate Study, Stevens Institute of Technology, Western Maryland College, University of Pennsylvania, University of Maryland; Bridgewater College, 1966–1984.
- A. Olivia Cool *Associate Professor of Piano and Theory, Emeritus*
B.A., Bridgewater College; Teacher's Certificate in Music, *ibid.*; Student, Johns Hopkins University; Peabody Conservatory of Music; M.Mus., American Conservatory of Music; Summer Student, Ithaca College; Bridgewater College 1937–1940; 1942–1976.
- George L. Fitchett *Associate Professor of Business Administration, Emeritus*
B.S., United States Naval Academy; M.B.A., Harvard University; Bridgewater College, 1965–1985.
- Lowell V. Heisey *Professor of Chemistry, Emeritus*
B.A., Manchester College; M.S., Purdue University; Ph.D., *ibid.*; Bridgewater College, 1950–1985.
- S. Ruth Howe *Associate Professor of Home Economics, Emeritus*
B.A., Manchester College; M.Sc., The Pennsylvania State University; Graduate Study, Columbia University, Syracuse University; Bridgewater College, 1945–1971.
- Robert L. Hueston *Associate Professor of Accounting, Emeritus*
B.A., Bethany College; M.B.A., University of Wisconsin; Certified Public Accountant; Bridgewater College, 1953–1986.

**Faculty
(Cont.)**

- Nelson T. Huffman *Professor of Voice and Director of Music, Emeritus*
B.A., Bridgewater College; Graduate, Peabody Conservatory of Music, Voice Certificate; B.M., Cincinnati Conservatory of Music; M.M., Northwestern University; D.Mus., Bridgewater College, 1925–1965.
- Harry G. M. Jopson *Professor of Biology, Emeritus*
B.S., Haverford College; M.A., Cornell University; Ph.D., *ibid.*; Bridgewater College, 1936–1943; 1946–1981.
- Frederick G. Keihn *Professor of Chemistry, Emeritus*
B.S., Randolph-Macon College; M.S., Lehigh University; Ph.D., Syracuse University; Bridgewater College, 1967–1986.
- M. Ellsworth Kyger *Professor of German, Emeritus*
B.A., Bridgewater College; B.S., in Music Education, *ibid.*; Graduate Study, University of Maryland; Ph.D., Catholic University; Bridgewater College, 1955–1988.
- Bernard S. Logan *Professor of Economics and Business Administration, Emeritus*
B.A., Randolph-Macon College; M.S., University of Wisconsin; Ph.D., *ibid.*; Bridgewater College, 1959–1967; 1978–1984.
- Clarence E. May *Professor of English, Emeritus*
B.A., Bridgewater College; M.A., University of Virginia; Graduate Study, Columbia University; School of Extra-mural Studies, University of Birmingham, Stratford-on-Avon; University of London; Bridgewater College, 1946–1968.
- William L. Mengebier *Professor of Biology, Emeritus*
B.S., The Citadel; M.A., Oberlin College, 1968–1987.
- Lowell A. Miller *Business Manager and Treasurer, Emeritus*
B.A., Bridgewater College; Graduate Study, Virginia Polytechnic Institute and State University; Bridgewater College, 1958–1983.
- Anna Mae Myers *Assistant Professor of Home Economics, Emeritus*
B.S., Bridgewater College; M.S., Virginia Polytechnic Institute and State University; Bridgewater College, 1963–1978; 1980–1983.
- Janet W. Stevens *Assistant Professor of Home Economics, Emeritus*
B.S., University of Maryland; M.Ed., James Madison University; Bridgewater College, 1978–1986.
- Martha B. Thornton *Professor of Religion, Emeritus*
B.S., Defiance College; M.A., Hartford Seminary Foundation; Ed.R.D., *ibid.*; Bridgewater College, 1968–1986.
- Fred F. Wampler *Professor of Education, Emeritus*
B.A., Bridgewater College; M.A., George Washington University; Ed.D., University of Maryland; Bridgewater College, 1957–1988.
- * * * * *
- John G. Barr *Professor of Organ and Piano*
B.S., Manchester College; S.M.M., Union Theological Seminary; S.M.D., *ibid.*; Bridgewater College, 1968–
- Paul J. Bender *Professor of Mathematics*
B.S., Albright College; M.S., Ohio University; Ph.D., *ibid.*; Bridgewater College, 1976–

Faculty (Cont.)

- Carl H. Caldwell *Dean for Academic Affairs and Professor of History*
B.A., Anderson College; M.A., Ohio University; Ph.D., Indiana University; Bridge-
water College, 1989—
- Charles J. Churchman** *Professor of English*
B.A., University of Virginia; M.A., *ibid.*; Ph.D., University of Tennessee; Bridge-
water College, 1967—
- James G. Fox *Carman G. Blough Professor of Accounting*
B.S., University of Maryland; M.A., The George Washington University; D.B.A.,
ibid.; Certified Public Accountant; Certificate in Management Accounting; Bridge-
water College, 1987—
- L. Michael Hill *Professor of Biology*
B.S., Alabama College; M.S., Tennessee Technological University; Ph.D., Univer-
sity of New Hampshire; Bridgewater College, 1972—
- Lanny W. Holsinger *Professor of Education*
B.A., Bridgewater College; M.S., James Madison University; C.A.G.S., Virginia
Polytechnic Institute and State University; Ed.A.D., *ibid.*; Bridgewater College,
1987—
- Thomas M. Kinder *Professor of Physical Education and Director of Athletics*
B.A., University of Charleston; M.S., Marshall University; Ed.D., Vanderbilt Uni-
versity; Bridgewater College, 1978—
- James J. Kirkwood *Professor of English*
B.A., Wake Forest University; M.A., *ibid.*; Ph.D., Duke University; Bridgewater
College, 1968—
- W. Robert McFadden *Anna B. Mow Professor of Religion*
and Director of Convocations
B.A., Manchester College; B.D., Bethany Theological Seminary; Th.D., Boston
University; Bridgewater College, 1961—
- David G. Metzler *Professor of Philosophy and Religion*
B.A., McPherson College; B.D., Bethany Theological Seminary; S.T.M., Harvard
University; Th.D., Boston University; Bridgewater College, 1958–1962; 1966–1982;
1983—
- Dean Royce Neher *Professor of Computer Science and Physics*
B.S., McPherson College; M.S., University of Kansas; Ph.D., *ibid.*; Bridgewater
College, 1961—
- Daniel M. Spitzer, Jr. *Professor of Business Administration*
B.A., University of Virginia; M.S., *ibid.*; M.B.A., Marketing College of St. Thomas;
Ph.D., University of Virginia; Bridgewater College, 1989—
- Thomas R. Thornley, Jr. *Professor of Music*
B.A., University of South Carolina; M.M.E., *ibid.*; Ed.D., University of Virginia;
Bridgewater College, 1972—
- Gary L. Tyeryar** *Professor of English*
B.A., Western Maryland College; M.A., Rice University; Ph.D., University of
Wisconsin; Bridgewater College, 1968—

**On leave of absence, 1989–90.

Faculty (Cont.)

Donald R. Witters *Professor of Psychology*
B.A., Elizabethtown College; B.D., Bethany Theological Seminary; M.A., Arizona State University; Ph.D., *ibid.*; Bridgewater College, 1968—

* * * * *

K. Gary Adams *Associate Professor of Music*
B.M., Baylor University; M.M., *ibid.*; Ph.D., University of North Texas; Bridgewater College, 1982—

William P. Albright *Associate Professor of English*
B.A., McPherson College; B.D., Bethany Theological Seminary; M.S., University of Omaha; Bridgewater College, 1967—

Richard L. Bowman *Associate Professor of Physics*
B.S., Eastern Mennonite College; M.A., Kent State University; Ph.D., Oregon State University; Bridgewater College, 1986—

Erich E. Brumbaugh *Associate Professor of Chemistry*
B.A., Bridgewater College; Ph.D., University of Virginia; Bridgewater College, 1986—

Joseph M. Crockett *Associate Professor of Chemistry*
B.S., Hampden-Sydney College; Ph.D., University of North Carolina at Chapel Hill; Bridgewater College, 1985—

James W. Eaton *Associate Professor of Economics
and Business Administration*
B.S., University of Arkansas; M.B.A., *ibid.*; Ph.D., University of Missouri-Columbia; Bridgewater College, 1985—

F.I. Dorothy Evans *Visiting Associate Professor of Education*
B.A., The Open University; Doctoral Candidate, University of Bristol; Member, Order of the British Empire; Bridgewater College, 1988—

Lucien T. Hall, Jr. *Associate Professor of Mathematics*
B.S., University of Richmond; M.Ed., University of Virginia; Ed.D., *ibid.*; Bridgewater College, 1988—

Mary Frances Heishman *Associate Professor of Physical Education*
B.A., Bridgewater College; M.A., James Madison University; Ed.D., University of Virginia; Bridgewater College, 1970—

Michael S. Hensley *Associate Professor of Biology*
B.S., Bridgewater College; M.S., James Madison University; Ph.D., University of Tennessee; Bridgewater College, 1986—

Jesse E. Hopkins, Jr. *Associate Professor of Music*
B.S., Bridgewater College; M.M.E., James Madison University; D.M.E. candidate, University of Illinois; Bridgewater College, 1977—

Robert B. Houts, Jr. *Associate Professor of Spanish*
B.A., Bob Jones University; M.A., University of Tennessee; Graduate Study, University of Kentucky; Bridgewater College, 1963—

George Webster Kent *Associate Professor of Psychology*
B.A., Franklin College; M.A., University of Oregon; Graduate Study, University of Wisconsin; Bridgewater College, 1954—

**Faculty
(Cont.)**

- Paul M. Kline *Associate Professor of Art*
B.A., Bridgewater College; M.F.A., Virginia Commonwealth University; Bridge-
water College, 1959–
- Barbara P. Long *Associate Professor of Foreign Languages*
B.A., Mary Washington College; M.A., Middlebury College; M.A., Tulane Univer-
sity; Ph.D., *ibid.*; Bridgewater College, 1983–
- Ralph C. MacPhail, Jr. *Associate Professor of Theatre, Speech, and English*
B.A., Bridgewater College; M.F.A., Virginia Commonwealth University; Bridge-
water College, 1972–
- Laura Susan Mapp *Associate Professor of Physical Education*
B.S., University of Richmond; M.S., University of Tennessee; Graduate Study,
University of Oregon; Bridgewater College, 1961–
- David K. McQuilkin *Associate Professor of History and Political Science*
B.A., Muskingum College; M.S.(L.S.), Case Western Reserve University; M.A.,
Kent State University; Ph.D., *ibid.*; Bridgewater College, 1985–
- Lamar B. Neal *Associate Professor of Political Science and History*
B.S., Mississippi State University; M.S., *ibid.*; J.D., University of Mississippi;
LL.M., *ibid.*; Graduate Study, Tulane University; Bridgewater College, 1971–
- Philip F. O'Mara *Associate Professor of English*
B.A., St. John's University; M.A., University of Notre Dame; Ph.D., *ibid.*; Bridge-
water College, 1989–
- Robert C. Shermer, Jr. *Associate Professor of Speech*
B.S., Wheaton College; Th.M., Northern Baptist Seminary; M.A., Northwestern
University; Ph.D., Southern Illinois University; Bridgewater College, 1989–
- Sarah E. Swank *Associate Professor of Biology*
B.S., James Madison University; M.A., University of Virginia; Ph.D., University
of Southern California; Bridgewater College, 1981–
- W. Steve Watson, Jr. *Associate Professor of Philosophy and Religion*
B.A., Furman University; M.Div., Southeastern Baptist Seminary; Graduate Study,
Emory University; Bridgewater College, 1970–1981; 1983–
- John E. White *Associate Professor of Mathematics*
B.A., Bridgewater College; M.S., Virginia Polytechnic Institute and State University;
Bridgewater College, 1960–1963; 1965–
- * * * * *
- Martha S. Armstrong *Assistant Professor of Accounting
and Business Administration*
B.A., Bridgewater College; M.S., University of Virginia; Certified Public Account-
tant; Bridgewater College, 1978–
- Daniel W. Bly *Assistant Professor of History*
B.A., Bridgewater College; M.A., Temple University; Graduate Study, Carnegie-
Mellon University, Temple University; Bridgewater College, 1965–1967; 1969–
- Carl F. Bowman *Assistant Professor of Sociology*
B.A., Elizabethtown College; M.S., University of Wisconsin-Madison; Ph.D., Uni-
versity of Virginia; Bridgewater College, 1982–83; 1986–

**Faculty
(Cont.)**

- June L. Craun* *Assistant Professor of Home Economics*
B.S., James Madison University; M.S., Virginia Polytechnic Institute and State University; Bridgewater College, 1985—
- Jon L. Dellett *Assistant Professor of Mathematics*
A.B., Fort Hays Kansas State College; M.A.L.S., Wesleyan University; M.S., New Mexico State University; Bridgewater College, 1972—
- Catherine L. Elick *Assistant Professor of English*
B.A., M.A., James Madison University; Ph.D., Vanderbilt University; Bridgewater College, 1988—
- Theodore W. Flory *Assistant Professor of Computer Science
and Manager of the C. E. Shull Computing Center*
B.A., Bridgewater College; M.C.S., University of Virginia; Bridgewater College, 1970—
- Forrest L. Frazier* *Interim Assistant Professor of Education*
B.S., University of Virginia; M.S., George Washington University; Bridgewater College, 1989—
- Brian C. Hildebrand *Dean for Admissions
and Assistant Professor of Education*
B.A., Bridgewater College; M.A., James Madison University; M.Ed., *ibid.*; Graduate Study, University of New Mexico; Bridgewater College, 1967—
- David C. Huffman *Assistant Professor of Economics*
B.A., Bridgewater College; M.A., University of Virginia; Ph.D. candidate, *ibid.*; Bridgewater College, 1980—
- Edward W. Huffstetler *Assistant Professor of English*
B.A., Coker College; M.A., Ph.D., University of Iowa; Bridgewater College, 1988—
- Daniel A. Kegerreis *Assistant Professor of Physical Education
and Head Athletic Trainer*
B.A., Shepherd College; M.S., Indiana University; Bridgewater College, 1986—
- Manown Kisor, Jr. *Assistant Professor of Business Administration*
B.A., Trinity College; M.B.A., New York University; Bridgewater College, 1989—
- Elizabeth L. Kyger* *Assistant Professor of Biology*
B.A., Winthrop College; M.A., University of North Carolina; Bridgewater College, 1954–58; 1966—
- Wilmer E. Leatherman *Assistant Professor of Physical Education*
A.A., Ferrum Junior College; B.S., Milligan College; M.Ed., Lynchburg College; Bridgewater College, 1985—
- Stephen L. Longenecker *Assistant Professor of History*
B.S., Shippensburg University; M.A., West Virginia University; Ph.D., The Johns Hopkins University; Bridgewater College, 1989—
- Susan L. Piepke *Assistant Professor of Foreign Languages*
B.A., State University of New York; M.A., University of Rochester; M.A., Middlebury College; D.M.L., *ibid.*; Bridgewater College, 1988—

**Faculty
(Cont.)**

- John S. Spencer *Assistant Professor of Physical Education*
B.A., Shepherd College; B.S., *ibid.*; M.A., Appalachian State University; Bridge-
water College, 1967—
- Nancy W. St. John *Assistant Professor of Home Economics*
B.S., Southeast Missouri State University; M.S., Florida State University; Ph.D.,
ibid.; Bridgewater College, 1988—
- Grace F. Steinberg *Assistant Professor of Home Economics*
B.S., William Woods College; M.S., University of Missouri at Columbia; Bridge-
water College, 1981—
- Carlyle Whitelow *Assistant Professor of Physical Education*
B.A., Bridgewater College; M.Ed., University of Virginia; Bridgewater College,
1969—
- * * * * *
- William E. Abshire *Instructor in Religion*
B.A., Bridgewater College; M.A.Th., Bethany Theological Seminary; Ph.D. candi-
date, University of Virginia; Bridgewater College, 1987—
- Kathleen M. Blair* *Instructor in Foreign Languages*
B.A., Pennsylvania State University; M.A., University of Florida; Bridgewater
College, 1989—
- Kathryn Reid Bowman* *Instructor in Education*
B.A., Bridgewater College; M.S., James Madison University; Bridgewater College,
1974—
- Joyce E. Brunk* *Interim Instructor in Education*
B.A., Eastern Mennonite College; M.A., West Virginia University; Ed.S., Stetson
University; Bridgewater College, 1989—
- David A. Cook *Instructor in Art*
B.A., Belhaven College; M.F.A., James Madison University; Bridgewater College,
1986—
- Bruce H. Elliott* *Instructor in Accounting*
B.A., Bridgewater College; Certified Public Accountant; Bridgewater College, 1978—
1981; 1982–1983; 1986–87; 1989—
- Mary Beth Flory* *Interim Instructor in Music*
B.S., Bridgewater College; Bridgewater College, 1989—
- Kathryn J. Gardner* *Interim Instructor in Music*
B.M., Emory and Henry College; M.M., James Madison University; Bridgewater
College, 1989—
- Carson C. Good* *Instructor in Social Work*
B.A., Bridgewater College; M.S.W., Virginia Commonwealth University; Bridge-
water College, 1977—
- Robert F. Kellogg* *Instructor in Music*
B.S., Columbia University; M.A., Montclair State College; Bridgewater College,
1984—

Faculty (Cont.)

- Lisa R. Moore* *Instructor in English*
B.A., Duke University; M.A., University of Virginia; 1988—
- David A. Penrod* *Instructor in Business Law*
B.A., Bridgewater College; J.D., Ohio State University; Bridgewater College, 1973—
- R. Hal Sharp* *Instructor in Geography*
B.S., Tennessee Polytechnic Institute; M.S., University of Tennessee; Bridgewater College, 1988—
- Philip T. Spickler *Instructor in Physics*
B.S., Bridgewater College; M.S., Ohio University; Bridgewater College, 1988—
- Ann N. Stearns* *Instructor in Special Education*
B.A., Hood College; M.Ed., University of Virginia; Bridgewater College, 1989—
- Roya W. Stern *Interim Instructor in Sociology*
B.A., Manchester College; M.T.S., Harvard University; Graduate study, University of Chicago; Bridgewater College, 1989—
- Shane D. Stevens *Instructor in Business Administration
and Head Coach in Track and Cross Country*
B.A., Bridgewater College; M.B.A., James Madison University; Bridgewater College, 1982—
- Joyce A. Wead* *Instructor in Voice*
B.M., George Peabody College for Teachers; M.M., Northwestern University; Graduate Study, University of Texas-Austin; Bridgewater College, 1987—
- C. Mark Wetzel* *Instructor in Music*
B.S., James Madison University; Bridgewater College, 1989—
- Hubert N. Whitten* *Instructor in English*
B.A., Bridgewater College; B.D., Bethany Theological Seminary; M.A., Northern Illinois University; Bridgewater College, 1988—
- Kimberly D. Wright *Instructor in Physical Education and
Director of the Swimming Program*
B.S., Bridgewater College; M.S., James Madison University; Bridgewater College, 1988—

* * * * *

Adjunct Faculty

- W. H. Holthaus *Medical Technology*
B.A., University of Dubuque; M.D., State University of Iowa; Staff member of Rockingham Memorial Hospital.
- Randall G. Vandevander *Medical Technology*
B.A., Bridgewater College; Certificate in Medical Technology, School of Medical Technology, Rockingham Memorial Hospital; Staff member of Rockingham Memorial Hospital.

*Part Time

**Faculty
Councils
and
Committees**

1989-90

Council on Administration: *Geisert, DeWitt, Hensley, Hildebrand, Caldwell, Miracle, Steinberg, Ulrich, Wampler, White, Foley.

- A. Committee on Budgets and Finance: *Wampler, Geisert, Ulrich.
- B. Committee on Computing Center: *Ulrich, DeWitt, Flory, Caldwell, Howdyshehl, Neher, Wampler, White.
- C. Committee on Educational Program Grants: *DeWitt, Caldwell, Kent, Ulrich, Watson
- D. Committee on Institutional Research: *Ulrich, Caldwell, Flory, Foley, Miracle, Neher, White.
- E. Campus Center Operational Committee: *A. Hill, Foley, Geisert, Patterson, Miracle, Ulrich, Wampler.
- F. Swimming Pool Operational Committee: *Kinder, Geisert, Caldwell, A. Hill, Wright, Miracle, Ulrich, Wampler.
- G. Committee on Faculty Social Life: *MacPhail, Barr, Crockett, Foley, Neal, Spickler, St. John, R. Watson.

Council on Education: *Caldwell, Geisert, Greenawalt, Howdyshehl, Bender, M. Hill, Holsinger, Kirkwood, McFadden, Ulrich.

- A. Committee on Curricular Development: Members of the Council on Education (see above); two students from Student Senate.
- B. Committee on Teacher Education: *Holsinger, Caldwell, Evans, Hall, Howdyshehl, Kinder, Miracle, Steinberg, Thornley, Kirkwood, Andes, Clymore, Ulrich.
- C. Committee on Admissions and Student Aids: *Ulrich, Albright, Caldwell, Miracle, Thornley, Hildebrand, Fairchilds.
- D. Committee on the Bicentennial of the United States Constitution: *McQuilkin, **Stone, McFadden, Ulrich, Geisert.
- E. Committee on Career Planning and Placement: *Minnich, Bryant, Caldwell, Dean, Holsinger, Howdyshehl, Miracle, Spitzer.
- F. Committee on Convocations: *McFadden, Brumbaugh, Cook, Kent, Longenecker, Miracle, Shermer, Witters, two students.
- G. Committee on English Composition Proficiency: *Kirkwood, Bly, Elick, O'Mara.
- H. Endowed Lectureships Committee: *Ulrich, Caldwell, DeWitt, MacPhail, McFadden, McQuilkin.
- I. Committee on Health Professions: *M. Hill, R. Bowman, Brumbaugh.
- J. Committee on the Library: *Caldwell, Bly, Fox, M. Hill, Neal, St. John, Greenawalt, two students.
- K. Committee on Philomathean: *Eaton, Brumbaugh, Kline, Long, Huffstetler.

Council on Student Affairs: *Miracle, Atkin, A. Hill, Ulrich, Metzler, Adams, Dellett, MacPhail, Neher, Smith, four students.

- A. Campus Center Program Council: Houts, Spickler, Metzler, A. Hill, Patterson, Miracle.
- B. Committee on Cultural Activities: *Hopkins, MacPhail, A. Hill, Bly, Brumbaugh, McFadden, Swank, two students.
- C. Committee on International Students: *Ulrich, C. Bowman, Caldwell, Eaton, Evans, Houts, Long, Metzler, Miracle, Piepke.
- D. Committee on Student Publications and Communications: *Miracle, DeWitt, Huffstetler, Elick, four students.
- E. Automobile and Traffic Committee: *Miracle, Wampler, Miller, Shaffner.

Council on Religious Activities: *Metzler, R. Bowman, W. Flory, Houts, Whitelow, Barr, C. Bowman, two students.

A. Committee on Church Deputations: *W. Flory, Barr, Hopkins, MacPhail, two students.

B. Committee on Spiritual Life Institute: *W. Flory, Geisert, Mitchell, McFadden, Metzler, Shull.

Council on Athletics: *Kinder, Geisert, Crockett, Huffman, Mapp, Miracle, Swank, Wampler, two students.

*Chairman

**Honorary Chairman

**Faculty
Councils
and
Committees
(Cont.)**

Enrollment				Summer Session I—1989			
Session 1988-89							
	<i>Men</i>	<i>Women</i>	<i>Totals</i>		<i>Men</i>	<i>Women</i>	<i>Totals</i>
Seniors	71	75	146	Resident			
Juniors	75	95	170	Students	5	15	20
Sophomores	114	141	255	Non-Resident			
Freshmen	158	196	354	Students	13	33	462
F.T. Totals	418	507	925		18	48	66
Part-time &				Summer Session II—1989			
Audit	6	8	14		<i>Men</i>	<i>Women</i>	<i>Totals</i>
Telecourse				Resident			
(P.T.)	11	29	40	Students	12	14	26
P.T. Totals.....	17	37	54	Non-Resident			
				Students	30	33	63
				Telecourse			
				(P.T.)	5	23	28
Totals	435	544	979	Totals	47	70	117

COLLEGE CALENDAR

An integral part of Bridgewater's academic program is the 3-3-1-3 calendar. The numbers 3-3-1-3 refer to the number of courses a student studies in 10-10-3-10 week terms, respectively. For 1990-91, the specific calendar is given on page 131.

Many advantages over traditional college calendars are gained through use of the 3-3-1-3 calendar. Some of these advantages accrue because unusual opportunities are afforded; some of them result from a retention of proven procedures. Among the advantages are the following:

- Students study fewer courses at one time, but study them more intently than under the traditional semester or quarter calendars. Classes typically meet four sixty-minute periods per week, giving ample time for instruction to be congruent with the credit given.
- Professors teach fewer courses at one time than under the traditional semester or quarter calendars.
- The unit of credit is equivalent to the semester hour. Thus, transfer of credits is facilitated.
- Three and four unit courses, the same size as under the semester calendar, are retained.
- Included is a three-week Interterm during which students study a single course or engage in independent study and research. Interterm classes, with a flexible classroom schedule, are able to engage in extended discussions, off-campus excursions, or extensive field work.
- Scheduled in February, the interterm provides a timely change in the routine in the long period between January and May.



1990-91 Calendar

Summer Session 1990

May 28	Session I Begins
June 15	Session I Ends
June 18	Session II Begins
July 3	5:00 p.m., Independence Day Recess Begins
July 5	8:00 a.m., Independence Day Recess Ends
July 27	Session II Ends

Fall Term

August 27-28	Meetings of the Faculty
August 29-30	Student-Faculty Planning Conference
August 31	New Student Orientation Begins
September 3-4	Registration
September 5	Classes Begin
October 5	Midterm Grades
November 7-9	Final Examinations

Winter Term

November 12	Registration
November 20	5:00 p.m., Thanksgiving Recess Begins
November 26	8:00 a.m., Thanksgiving Recess Ends
December 21	Midterm Grades
December 21	5:00 p.m., Christmas Recess Begins
January 7	8:00 a.m., Christmas Recess Ends
Jan. 30-Feb. 1	Final Examinations

Interterm

February 4	Interterm Begins
February 22	Interterm Ends

Spring Term

March 4	Registration
March 5	Classes Begin
March 28	5:00 p.m., Good Friday Recess Begins
April 1	8:00 a.m., Good Friday Recess Ends
April 5	Midterm Grades
April 5	Founders Day
April 27	May Day
May 7-9	Final Examinations
May 11	Alumni Day
May 12	11:00 a.m., Baccalaureate Service
May 12	3:00 p.m., Commencement

1990

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24	25	26	27	28	29	30

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17	18	19	20	21	22	23
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College Calendar 1990-91

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Travel Directions



Bridgewater College is located seven miles southwest of Harrisonburg in the two of Bridgewater in the Shenandoah Valley. It is easily accessible by automobile, bus, and air. Motorists traveling on Interstate 81 may reach Bridgewater by exiting at the Mt. Crawford-Bridgewater Exit (Exit 61, six miles south of Harrisonburg) and following State Route 257 which is the northern boundary of the College campus. Piedmont Airlines serve Bridgewater. Travelers to and from Bridgewater emplane and deplane at the Shenandoah Valley airport (listed on timetable as the Staunton terminal) near Weyers Cave. Auto rental and limousine service are available. Greyhound buses serve Harrisonburg, and taxis are available in Harrisonburg and Bridgewater. Following are mileages to some cities:

Baltimore, MD	180	New York, NY	345
Charleston, WV	235	Norfolk, VA	215
Columbus, OH	325	Philadelphia, PA	265
Dover, DE	220	Pittsburg, PA	220
Hagerstown, MD	110	Raleigh, NC	230
Harrisburg, PA	180	Richmond, VA	125
Johnson City, TN	278	Roanoke, VA	110
Lynchburg, VA	95	Washington, DC	125
Morgantown, WV	150	Winston-Salem, NC	184

